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US ARMY INSTITUTE FOR ADVANCED RUSSIAN AND **EAST EUROPEAN STUDIES**



A COMPREHENSIVE EXAMINATION OF THE SOVIET NAVAL INFANTRY

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A COMPREHENSIVE EXAMINATION OF THE SOVIET NAVAL INFANTRY

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FOREWORD

This research project represents fulfillment of a student requirement for successful completion of the overseas phase of training of the Department of the Army's Foreign Area Officer Program (Russian).

Only unclassified sources are used in producing the research paper. The opinions, value judgments and conclusions expressed are those of the author and in no way reflect official policy of the United States Government; Department of Defense; Department of the Army; Office of the Assistant Chief of Staff of Intelligence; or the United states Army Institute for Advanced Russian and East European Studies.

Interested readers are invited to send their comments to the Commander of the Institute.

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ROLAND LAJOI

LTC, MI Commander

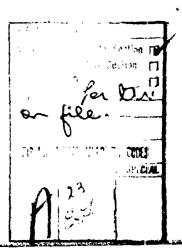


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SUMMARY

In the period following World War II, the Soviet government disbanded their famous naval infantry units. However, on July 24, 1964, the first public announcement of a "new" Soviet Naval Infantry was printed in the Soviet newspaper, <u>Krasnaia Zvezda</u> (<u>Red Star</u>). Since the early 1960's, this "new" Soviet Naval Infantry has grown in size, has improved its capabilities, and now presents a formidable weapon in the defense arsenal of the Soviet government.

What is this "new weapon" - the Soviet Naval Infantry and what exactly is a Soviet Marine?

taken the analysis and comparison of the many Soviet/
Western sources, available at the U.S. Army Russian
Institute, Garmisch, Germany, which describe various
facets of the Soviet Naval Infantry during the period
1964-1977. The author provides a clear, concise understanding and evaluation of the qualitative and quantitative aspects of this "new" Soviet Naval Infantry, including the characteristics of today's Soviet Marine, his
capabilities, and his Order of Battle. The author thus
provides a strong foundation from which can be evaluated
the Soviet Marine's tactics and potential missions.

INTRODUCTION

What is this "new weapon" in the Soviet defense arsenal, as published in <u>Krasnaia Zvezda</u> (<u>Red Star</u>) on July 24, 1964, - the Soviet Naval Infantry? What exactly is a Soviet Marine? This research paper proposes to answer exactly these two questions. In order to provide a complete understanding and evaluation of today's Soviet Naval Infantry, this paper is organized thusly; 1) to evaluate the individual Soviet Marine and the environment in which he lives and works, 2) to evaluate the equipment that he uses to perform his work, 3) to evaluate the functioning of the Soviet Naval Infantry units, 4) to establish the command structure of these Soviet Naval Infantry units, and 5) to evaluate and determine what the Order of Battle is for the Soviet Naval Infantry.

More specifically, Chapter 1 will include a discussion of the re-establishment of the Soviet Naval Infantry in the early 1960's.

Chapter 2 will examine the procedures to become a Marine. Specific details of the life and work of a Soviet Marine will be analyzed - the location of the various Naval Infantry bases, including those of the other Warsaw Pact countries; the Marine's uniforms; his daily schedule; and his living conditions. Morale and discipline problems will be evaluated. The rank

structure and career patterns within the Naval Infantry will be discussed. Finally, the qualities which are expected of a Soviet Marine will be presented.

Chapter 3 will examine the specific training and education that a Soviet Marine receives including preinduction, recruit training, and unit training. Specific subjects taught in the areas of infantry, naval,
political, physical, and specialty training will be presented. The Soviet Marine's daily training schedule and
the training methods and areas will be described. In
addition, the training and education of officers will
be presented.

Chapter 4 will describe the characteristics of the types of equipment and weapons which are used by the Soviet Naval Infantry, including special training uniforms and equipment.

Chapter 5 will present information on the various amphibious ships which are used by the Soviet Naval Infantry and other Warsaw Pact countries. This information will include characteristics and capabilities of these ships. Data on the distribution by fleet of these snips is also presented. There will also be an examination of the new development and use of Air Cushion Vehicles by the Soviet Naval Infantry. Finally, information on various naval aircraft which are and could be

used in conjunction with Soviet Naval Infantry activities will be presented.

Chapter 6 will examine the various types of training crercises in which the Soviet Naval Infantry has participated. These exercises consist of large scale training exercises, including those exercises with other Warsaw Pact countries, and additional deployments of amphibious shipping. Information pertaining to these catagories will include location and date of exercise and general characteristics of the exercise.

Chapter 7 will present the command structure of the Soviet Naval Infantry, to include the names of officers, their ranks, and the type of unit which they commanded. Thus an approximate Order of Battle will be developed.

Chapter 8 will examine the size and type of units of the Soviet Naval Infantry in attempting to determine its Order of Battle. This examination will be based upon the facts presented by the various Soviet/Western sources and the impact of the approximate Order of Battle, obtained from the command structure in Chapter 7. Information regarding the size and type of units in other Warsaw Pact countries will also be presented.

As mentioned above for Chapters 2, 5, 6, and 8, information on various aspects of the other Warsaw

Pact countries will be presented. However, this information will include only that gleaned from the sources used during the research on the Soviet Naval Infantry. Thus, since the emphasis of this paper is the Soviet Naval Infantry, the information on the other Warsaw Pact countries will be incomplete.

The main text of this paper is further supported by Appendices A through K which provide definitions, maps, and detailed information on equipment, weapons, thips, aircraft, Soviet Marine officers, and Order of Battle.

A research paper of this nature, where numerous sources on the Soviet Naval Infantry have been analyzed and evaluated, always brings up additional questions which, due to the present lack of information or evidence, need to be further researched. The answers to these questions would certainly enhance a fuller understanding of the Soviet Naval Infantry. These questions which have arisen during the author's research are included at the end of the main text in conjunction with the final conclusions and recommendations of the author.

Finally, to present as complete a picture and as full an understanding as possible on the available information on the Soviet Naval Infantry, the author utilized an extensive collection of Soviet/Western

sources, dealing with various aspects of the Soviet Naval Infantry. This extensive bibliography is included with this paper in order to provide a reference source for future researchers to utilize. Many bources were not included in this bibliography, including, 1) those sources dealing with the Soviet Naval Infantry, but which were unavailable to the author at the time of this report (example; Marine Corps Gazette prior to 1976. Seapower and various Norwegiam, West German, Polish, and East German sources), 2) articles dealing with the historical aspect of the Soviet Naval Infantry, and 3) those articles dealing not with the Soviet Naval Infantry but with the Soviet Navy and its application toward future missions and capabilities. These omitted sources certainly would contain information applicable to further research in other aspects of the Soviet Naval Infantry.

Thus, the organization of this research paper has been briefly described. It is now time to turn to the detailed investigation of the Soviet Naval Infantry and find out "What exactly is a Soviet Marine?"

Chapter 1

RE-ESTABLISHMENT Of The SOVIET NAVAL INFANTRY

At the end of World War II, the Soviet Naval Infantry consisted of 330,000 men¹ and had participated in 113 amphibious operations.² The Naval Infantry had earned their place in Soviet naval history by their courage and tenacity in battle and their strong fighting spirit. The Germans held the Soviet Naval Infantry in high regard and honored them with the titles, "Black Death", "Black Devil", "Black Cloud" and "Black Commissar". The word, black, referred to their distinctive uniforms.

ently disbanded. Except for historical articles, there were never published any Soviet articles pertaining to a current Soviet Naval Infantry until July 24, 1964. On that date, the Soviet newspaper, <u>Krasnaia Zvezda</u> (<u>Red Star</u>) published three articles with pictures of the current and apparently new Soviet Naval Infantry. Since that date, numerous articles have appeared in various Soviet newspapers and periodicals, discussing their Naval Infantry. In addition, many Western historians and analysts have written articles pertaining to the new Soviet Naval Infantry.

Unfortunately, many of these Western writers have

assumed that the new Naval Infantry was re-established on July 24, 1964. This could hardly be the case, even if you only considered the logistical and administrative problems involved in re-establishing a military organization. A Soviet naval dictionary, published in 1959, states that the Naval Infantry as a special branch of the Soviet Navy is currently abolished. Therefore, the Soviet Naval Infantry was re-established between 1959 and July 24, 1964.

The exact date is unknown; however, several

Western authors do indicate various earlier time periods

for the re-activation. These include E.W. Besch, C.G.

Jacobsen⁷, N. NccGwire, and C.G. Pritchard - 1963; R. Bonus

and J.E. Moore - 1961-62; and even earlier are three

German sources which indicate 1960.8

Far more interesting is the evidence which appeared within the Soviet Union prior to July 24, 1964 and which, although not specifically mentioning a new, current Soviet Naval Infantry, did emphasize the need and application of amphibious operations and specially trained troops to conduct these operations.

In the late 1950's and early 1960's, this evidence includes numerous Soviet articles analyzing in detail U.S. amphibious operations in the Pacific during World War II. In addition many articles appeared

regarding Soviet experiences and future needs including the following:

- Admiral Iu. Ladinskii, "On the Theory of Naval Art", July, 1957.
- E. Ivanitskii, "Naval Landings", February, 1958.
- LtCol B. Briukhanov, "Infantry Attack From The Sea", October 11, 1962.
- Captains Third Rank N. Shalagin and N.
 Alekseev, "Soldiers Storm The Shore",
 October 10, 1963.
- Captains First Rank A.G. Svetlov and L.A.
 Shimkevich, "Characteristics of
 Naval Landings in Modern Conditions",
 March, 1964.
- Admiral D.A. Tuz, "The Role of Naval Landing Operations in a Rocket-Nuclear War", June, 1964.9

One additional article which appeared in <u>Krasnaia</u>

<u>Zvezda</u> (<u>Red Star</u>) on June 11, 1965 describes a naval

tank officer in January, 1965 who had already com
manded his subunit for several years in a row. 10

Union began taking delivery of various types of landing ships and craft. The Soviet Union continued to build up its amphibious fleet with newer, larger, and more modern ships during the period 1956-1964. It was during this period that the concept of amphibious operations was being thoroughly discussed and reviewed within the Soviet Navy and government circles.

Therefore, the evidence from Soviet articles and Soviet activity certainly indicates that the Soviet Naval Infantry was re-established prior to July 24, 1964.

It is not the intent of this paper to analyze the reasons which prompted the Soviet government to re-establish its Naval Infantry. The following major incidents, which certainly influenced to some degree the Soviet decision making process regarding its Naval Infantry, are offerred to the reader for his analysis.

- a. The World War II experiences of the Soviet Naval Infantry.
- Admiral S.G. Gorshkov's close association with amphibious operations during World War II.
- c. U.S. experience in amphibious operations during World War II.
- d. The inability to interdict during the 1956 Suez crisis.
- e. The inability to interdict during the 1958 Lebanon crisis.
- f. The inability to protect its investment during the 1962 Cuban missile crisis.
- g. The development of Soviet strategic views on nuclear war and the use of conventional forces; also the development of the theories on local wars and wars of national liberation.

Although it can be concluded that the Soviet Naval Infantry was re-established prior to July 24, 1964, it did not make its first public appearance before Western observers until November 7, 1967. On this date, Naval

Infantry units from the Baltic Fleet participated in the military parade in Red Square in Moscow, commemorating the 50th anniversary of the October Revolution. 12

Finally, at the time that the Soviet Union was expanding its Naval Infantry in the early 1960's. Poland and the German Democratic Republic were also organizing units for specific training in amphibious operations. 13

Chapter 2

BASIC CHARACTERISTICS Of The SOVIET MARINE

What is a Soviet Marine? To understand the characteristics that identify a Soviet Marine, first, examine the definitions of Morskaia Pekota contained in Appendix A. This examination should provide a basic concept of a Soviet Marine to which can be applied the traits and qualities which will be developed and presented in this and succeeding chapters. For the purpose of this paper, a Soviet Marine will be considered an individual soldier within a military unit designated as Soviet Naval Infantry. The Soviet Naval Infantry will be those units which are trained primarily for naval landings and which are organizationally located within the Soviet Navy.

<u>Traditions</u>

Traditions play a large and significant role in the training, education and morale of the individual Soviet Marine and his Naval Infantry unit. As a beginning to those traditions, naval landings were first used by Russians in 907 A.D. 14 On November 16, 1705, the first units of Naval Infantry were established, organized, and equipped by Peter the Great. From 1705 until 1945, Naval Infantry units were used intermittently (against the Swedes in 1714, the Dutch in 1717, the French between 1798 and 1814; and in the Crimean War 1854-1855, the

Russo-Japanese War 1904, World War I 1914-1917, the Russo-Finnish War 1939, and World War II 1941-1945) 15; but did manage to gain fame and a hero's share of Russian/Soviet history, particularly in their 113 amphibious operations against the Germans and the Japanese during World War II. 16

Since the first Soviet news article on July 24. 1964, numerous articles have been published extolling the virtue and magnifying the eliteness of the Soviet Naval Infantry units. This publicity campaign, promoting the eliteness of the Soviet Marine, was based primarily on the developed traditions of previous Naval Infantry units in combat. This characteristic of eliteness has been further strengthened by assigning the honorific title of "Guards unit" to every Soviet Naval Infantry unit; 17 by conspicuously displaying the unit banner with earned military decorations at all ceremonial occasions. including the Marine's cath of allegiance and military parades (these are the same unit banners which are carried in the front of the units during combat assaults): 18 and by enforcing rigid entrance requirements, wearing distinctive uniforms, and emphasizing hard, demanding training. Due to their traditions, their status as members of elite units, and also their own significant accomplishments since the early 1960's, the Soviet Marines are highly

respected within the Soviet Navy. 19
Becoming A Marine

If a young man in the Soviet Union wants to become a Soviet Marine, what steps would be have to take?

Future Enlisted Men. First, those steps taken by Soviet youth who will become enlisted men in the Soviet Naval Infantry will be considered. Today, in the Soviet Union, military service is compulsory. Thus, Major-General P.E. Mel'nikov stated in 1975 that, if an individual wanted to become a Soviet Marine, the best route to take would be to become proficient in sports and to undertake the various training programs provided by DOSAFF (Voluntary Society for the Cooperation With the Army, Aviation, and Fleet) prior to induction into the armed forces. 20

In 1968, a new military service law was enacted, reducing the term of active service; but also establishing a compulsory pre-induction training program. This pre-induction training program is designed to psychologically and physically prepare the Soviet youth for military service and to provide them with basic military skills. This program is under the auspices of the Ministry of Defense and DOSAAF with the Communist Party and the Ministry of Higher and Secondary Education also exerting their influence on it. 21 This new pre-induction training consists of two parts. The first part is a 140 hour program

(actually over 200 hours) of basic military skills which is conducted in the secondary schools, factories and farms for the Soviet youth between the ages of 15 and 17. In the secondary schools, this program is conducted during the last two years of schooling. In addition there are summer camps and an 80 hour physical training program operated by DOSAAF. 22 Komsomol, OSVOD, 23 and DOSFLOT 24 are other organizations which provide political/military pre-induction training.

The second part of the pre-induction training program occurs only after the completion of the 140 hour program. Soviet youth may then participate in specialist programs involving special technical/military skills. This training will normally last about 1 year and will be undertaken during the year prior to induction. 25

On their 17th birthday, Soviets are required to register for the draft. The following year, the Soviet youth are drafted into military service during the May-June and November-December induction periods. At the present time, the initial tour of service for a Soviet Marine is two years. 27

During the initial induction process, the young man must first report to his local military committee where a screening process occurs, including an interview, a physical/medical exam, and various tests to determine

ment of an individual to a particular service will be based upon the individual's level of education, physical capability, his membership in a Komsomol organization, pre-military training, needs of the individual services, and, finally, consideration of personal requests. This process normally takes about two weeks.

It is during this processing period that, if a youth desires to become a Marine, he may so indicate his preference to the military committee. Since the Naval Infantry is not a separate service, but a part of the Soviet Navy, the Soviet youth will first be accepted by and assigned to the Soviet Navy; then he will again state his specific preference to join the Naval Infantry. 31 Generally, the Soviet Naval Infantry only accepts volunteers; nowever, at times, depending upon the need for specific skills, they may request the Soviet Navy to assign personnel to the Naval Infantry.

Acceptance into the Soviet Naval Infantry is based on the following criteria:

- 1. Must be physically fit first for duty in the Soviet Navy. Preference is given to those who are stalwart and broadshouldered with muscles.
- 2. Must have high moral character.
- 3. Must be politically reliable.

- 4. Must have a background (understanding) of physical labor and sports.
- 5. Must be aggressive.
- 6. Should have received a military specialty prior to induction. Again, emphasis is placed on education received through the DOSAAP training programs. 32

Once an individual has been selected for service in the Soviet Naval Infantry, his 2 year obligation begins. He is then directed to report to a Naval Infantry base for additional basic training and subsequent assignment to a unit.

During the initial screening process, individuals who exhibit special skills or leadership potential may be selected for additional specialty training or for NCO training following the induction and assignment process. Of course, for the Soviet Naval Infantry, these types of individuals would be selected based on need.

Future Officers. Now, to consider those steps taken by Soviet youth who will become officers in the Soviet Naval Infantry. These steps are divided into two phases of education - secondary education and college education (undergraduate level). Both phases of education for future officers are controlled by the Main Administration Of Military Educational Institutions of the Ministry of Defense, with subordinate control exercised

Naturally, the Communist Party exerts significant influence upon an officer's initial education. Likewise,

DOSAAF and the Ministry of Higher and Secondary Education contribute to the management of the various programs.

There are two categories for obtaining a secondary education. First and most prestigious are the Nakhimov and Suvorov cadet school systems. The Nakhimov school system is naval oriented, while the Euvorov school system is oriented to the other services. In the 1960's, these systems provided the primary source for candidates into the college training programs for future officers. The Soviet boys would enter this educational system between the ages of 7 and 13 and complete their secondary schooling within a military atmosphere. 35

However, it appears now that, particularly with the Nakhimov school system, this process has been severly curtailed. Only one Nakhimov school, located in Leningrad (opposite the famous ship of the October Revolution, "Aurora") remains. Candidates for this school enter between the ages of 15 and 16 and receive 2 years of training. Generally, these boys are the children of high government officials, party elite, and Naval officers. In addition to their privileged status within the Soviet society, the boys must also be physically fit to enter

talis achool. 37

Thus, since the previous primary source for future officer candidates has been drastically reduced, other means are now being used for input into the college education of future officers. One source, which is now the primary source, involves the direct recruitment of Soviet youth from the normal secondary schools. Thus, the DOSAAF training programs, as described previously, also play an important role in the training of future officer candidates. The local military committees are also used to screen candidates for the various military college training programs for future officers. The boys, who are recruited, must be within the ages of 17 and 21; must pass entrance exams in mathematics, physics, history, and the Russian language; must be physically fit; and must be politically reliable. They would also complete a 6-8 week basic training course prior to entering college. 38

Enlisted personnel and <u>praporshchiki</u> provide a second source from which are chosed promising candidates for commissioning into the officer corps. These individuals must be within the ages of 17 and 23. They must also pass the academic entrance exams and meet the other requirements for entrance into the various military colleges. 39

There are two general types of military schools

providing the officer condidates with a college education. The secondary military schools, which are 3 years in length, provide graduates with a technical engineering diploma and a commission in one of the military services. The higher military schools (similar to our military and naval academies), which are 4 and 5 years in length (the Naval schools are all 5 years in length), provide graduates with the more prestigious All-Union diploma and a commission in one of the military services. The educational process of these schools begins on September 1 and continues through July of each year. 41

There are more than 130 of these nigher military schools. Entrance into the more honored higher military schools is extremely competitive. In the category of the higher naval schools, the most prestigious school is the Frunze Higher Naval School in Leningrad. 43

Due to the specific requirements of the Soviet Naval Infantry for tank, artillery, communications, engineer, and other types of officers, in addition to regular infantry officers, the Naval Infantry accepts graduates (newly commissioned lieutenants) from the various secondary and higher military and naval schools. As a minimum, these new officers must meet the rigid criteria applied to the selection of enlisted men, as previously mentioned. Thus, only the batter graduating

graduate: from the higher naval schools would have a better initial understanding of the basic naval requirements of a Naval Infantry officer.

In addition to the acceptance of graduates directly from the various colleges, a Soviet Marine Colonal has indicated that Naval Infantry officers are also recruited from other services and other branches of the Soviet Navy. Thus, the majority of incoming officers to the Naval Infantry do not possess any knowledge nor any habits required of a Soviet Naval Infantry officer. Therefore, after their initial induction into the Naval Infantry, most officers will then attend a special Naval Infantry officer training course at Viborg. 48

Naval Infantry Bases. As presented in the preceding section, once enlisted men and officers are accepted by the Soviet Naval Infantry, they are then directed to report to specific Naval Infantry bases for further training and assignment to specific units. Thus, the question now is: where does the Soviet Marine live and work?

Due to the organizational relationship between the Soviet Naval Infantry and Soviet Navy, the Naval Infantry bases or cantonments will be found in the general areas

on the count where the four major Soviet fleets are located. In fact, one of these contonments is located on the shores of a buy which runs deep inland. 49 This. characterizes most of the contonment locations in order that training in amphibious landings with the Soviet Navy can be more effectively conducted. 50 Specific information as to exact location of the various Naval Infuntry bases is very scarce. The following details do exist regarding base locations and the location of various naval facilities, including naval bases for small ships and craft which may provide clues to "possible" nearby locations of Naval Infantry bases. data is divided into four categories according to the four major Soviet Fleet areas. Information on the major naval facilities of the other Warsaw Pact countries is also presented. Maps of the four Soviet Fleet areas are provided in Appendix B.

Northern Fleet Area:

Pechenga - headquarters and base camp for Soviet Naval Infantry (20km east of Norwegian border).51

Linakhamari - base camp for Soviet Naval Infantry (10 km north of Pechenga) 52

Severomorsk - headquarters of Commander-In-Chief, Northern Fleet,; ice-free, naval base.

Murmansk - large, ice-free, naval base.

Poliarnyi - well-protected harbor with naval base.

Baltic Sea Fleet Area:

- Viborg training camp for Soviet Naval Infantry (large shipyard, old Finnish-fortress port).53
- Leningrad possible location of the headquarters and supply depot of Soviet Naval Infantry, 54 nerve center of Soviet Navy, numerous naval training centers, Naval Logistics Command, base for amphibious task group.
- Baltisk Naval Infantry base, headquarters for the Commander-In-Chief, Baltic Sea Fleet and Commander, Southern Group, Baltic Sea Fleet.
- Tallin Naval Infantry base, headquarters for Commander, Northern Group, Baltic Sea Fleet, naval base for smaller ships.
- Kronstadt large naval base on Kotlin Island.

Kaliningrad - large naval base,

Lapaia - large naval base.

Riga - base for light naval forces.

Oranienbaum - base for light naval forces.

The German Democratic Republic has three naval flotillas, located at Peenemunde, Warnemunde, and Sassnitz. Landing ships are stationed in the Sassnitz's flotilla. Stralsund and Rostock also have naval bases, including the naval headquarters at Rostock. Poland has three significant naval

bases, located at Gdynia - main base of Polish Navy, Gdansk - fleet base and naval garrison, and Hel - base for light naval ships.

Black Sea Fleet Area:

Sevastopol - large naval base, headquarters of Commander-In-Chief, Black Sea Fleet.

Novorossisk - base for light naval forces.

Batumi - base for light naval forces.

Tuapse - base for light naval forces.

The headquarters of the Danube Flotilla is lo-

cated at Izmail. It also has shipyards, maintenance facilities, fuel depot, and a training installation at Kiliia, 30 miles from Izmail and at the Romanian port of Sulina. 55 Bulgaria has a base for landing craft at Kavaklar. Romania's main naval base is located at Constanta, while its naval headquarters is at Mangolia and its Danube Squadron is at Giurgiu.

Pacific Fleet Area:

Vladivostok - main fleet base, headquarters of the Commander-In-Chief, Pacific Fleet and the Commander, 5th Fleet (southern group), Pacific Fleet.

Sovetskaia Gavan - large naval base, including light naval forces, headquarters for the Commander, 7th Fleet (northern group), Pacific Fleet.

Petropavlovsk - major naval base with elements of the 7th fleet. Korsakov - base for light naval forces.

Magadan - page for light naval forces.

The two divisions of the Amur Flotilla are located at Blagoveshchensk and Khavarosk. 56

Caspian Sea Flotilla:

Baku - headquarters for the Caspian Sea Flotilla, which may be the main training center for the Soviet fleet.58

During the first few weeks after arriving at his new home - the Naval Infantry cantonment, the new recruit becomes familiar with the cantonment, the rules of conduct, and the daily schedule. He is provided with various allowances and is issued his basic uniforms, equipment, and individual weapon. 59

Military Uniforms Special uniforms were designed for the Soviet Marines combining aspects of the uniforms of both the present day Soviet Navy and the Naval Infantry in World War II. There is very little difference in the basic uniforms of the officers and the enlisted men in the Soviet Naval Infantry. What differences do exist will be noted in the following descriptions of the uniforms.

The Soviet Marine has three basic categories of uniforms: 1) his field or everyday training and work uniform, 2) his parade uniform, and 3) his walking-out

or "tiperty" uniform. Each uniform category has both a summer and a winter version of the uniform. In addition, there are certain uniform items for the field uniform issued during special training conditions. Finally, the Soviet Marine carries with him to the field a standard issue of personal equipment.

Field Uniforms:

Summer - This uniform consists of a black beret, black jacket, and black trousers tucked into calflength black boots. A small gold anchor on a small three-cornered red flag is located on the left side of the beret. On the front of the beret, enlisted men wear a small red star; but officers wear a gold braid cockade surrounding a red star, hammer, and sickle (see figure next $\mathcal{P}^{(i,j,j)}$). On the shoulder boards of the jacket, enlisted men wear the 2-letter designation of their respective fleet and their rank insignia. Officers' shoulder boards designate their rank. A blue and white horizontally striped, sleeveless T-shirt is worn underneath the jacket, which is left open at the coll-Halfway down the left slaeve, the traditional emblem of the Soviet Naval Infantrya golden anchor inside a red circle - is sewed onto the jacket.

Officer's hat emblem



Steeve emblem



Unlisted men wear a wide black, artificial leather belt with a large front plate on which the fleet insignia is located; however, officers wear a wide black, artificial leather belt with a shoulder strap, but without the front plate (similar to the USMC Sam Browne belt). The "Guards" emblem is also worn on the right front side of the jacket with military ribbons and decorations on the left side right above the breast pockets. 60

FIELD UNIFORMS



SUMMER
FIELD UNIFORM
FOR OFFICER OF THE
NAVAL INFANTRY



WINTER
FIELD UNIFORM
FOR OFFICERS OF THE
NAVAL INFANTRY

Winter - This uniform is the same as the summer field uniform, except that a heavy black jacket with a fur collar, a black fur cap with ear flaps, and black gloves are provided to the Soviet Marines. A black greatcoat (heavy duty overcoat), with the anchor emblem on the left arm sleeve, is also provided. This greatcoat is often used as a blanket during field exercises.

In field and landing exercises, the Soviet Marine would exchange his beret for a helmet with a large red star on the front. The Soviet Marine carries to the field the following standard issue of personal equipment in addition to his weapon and ammunition.

- artificial leather belt suspenders.
- a canvas cloth personal kit bag to which the greatcoat (rolled up) can be attached (this bag would used to hold a mess kit, field dressings, rations, and a rain poncho).
- a water bottle with cover.
- an entrenching tool with cover.
- a canvas cloth protective cover for his gloves.
- a cover for an oil can used for his weapon.
- a grenade pouch with two pockets.
- a pouch to carry three rifle magazines or a pouch to carry one large magazine for a machine gun. 62

When a Soviet Marine goes to the field, he generally will carry 55-65 lbs. of personal equipment depending upon the

time of the year. 63 If he carries a particular weapon or is a specialist, he may be required to carry more equipment.

In addition to the above mentioned field uniforms and equipment, there is equipment issued for specific training purposes. For example, there is a loose-fitting camouflage coverall for summer training and a white loose-fitting camouflage coverall with furlined boots and heavy gloves for Artic training. 64

Parade Uniforms:

Summer - This uniform is exactly the same type of uniform as the summer field uniform (all-black with a blue and white striped T-shirt) for both officers and enlisted men except it is made of much better quality. 65

Winter - Again, this uniform is the same, only better quality, as the winter field uniform. It would, however, be probable that the same heavy black jacket with fur collar, black fur cap, and black gloves is worn with both types of uniforms. 66

Summer - This uniform is the same as that worn by the Soviet sailor on liberty, thus a totally different type of uniform for the Soviet Marine compared to his field and parade uniforms. This summer uniform consists of a white jumper with a back flap and an open collar

(trimmed in blue and white stripes), the blue and white atriped T-shirt, black trousers, and black shoes. stead of a beret, the Soviet Marine wears the traditional sailor cap - white, round, and peakless with a hat band on which the name of the fleet is written in gold letters. The only distinction which can be made between a Soviet Marine and a Soviet sailor in this uniform is that on the left arm sleeve the Soviet Marine will be wearing his traditional golden anchor emblem. Instead of this type of uniform mentioned above, it appears that the Soviet Marine Officer wears the same type of uniform as the Soviet naval officer. This includes a white jacket. black trousers, white shirt with black tie, and a white barracks hat with bill. Shoulder boards with rank insignia are on the jacket. 67 Officers may possess more formal attire, although specific evidence of this type of uniform has not been found.

Winter - Again, for the enlisted men, this is the same type of uniform as that worn by the Soviet sailor and it is the same style as the summer walking-out uniform except the jumper is dark blue and the cap has a dark blue cover. A greatcoat is also provided with this uniform, presumably a different one than that worn during field exercises. Finally, it also appears that the Soviet Marine Officer wears the same type of uniform as the Soviet

naval officer and again it is the same style as the summer walking-out uniform. The only difference is that the jacket and hat are dark blue.

Thus, the one way to identify a Soviet Marine, no matter what uniform he is wearing, is the presence of the traditional "golden anchor in a red circle" emblem on the left arm sleeve of the uniform.

Daily Schedule. During the research for this paper, information on the specific daily time table for a Soviet Marine was not found; however, in general, evidence indicates a normal daily schedule consisting of military, political, and physical training combined with time for the care and cleaning of weapons and equipment and for rest and relaxation. The daily schedule would be altered during the actual conduct of landing exercises, but the preparatory training on board the ships would still retain the basic training elements of the daily schedule. More specifically, a daily training schedule might include the following:

0600 Reveille

0600-0700 Morning exercises and basic water procedures.

0700-0800 Shave, wash, dress followed by platoon inspections.

0800-0830 Breakfast

0830-0900 Political training

0900-1600 Military training, including a one hour break for lunch and a rest period.

1600-1700 Care and cleaning of weapons and equipment.

1700-1900 Military training, including self-study.

1900-2000 Political training

2000-2200 Dinner and free time

2200-2230 Propare uniform and equipment for the following day.

2230 Taps

The Soviet Marine trains each day of the week with possibly a little more relaxation time on Sunday. 70 Specific training subjects will be discussed in Chapter 3.

Living Conditions. As previously mentioned, the cantonments for the Soviet Naval Infantry are located on the shores of bays where there exists large, spacious sandy beaches and where the water of the bay is generally not disturbed by bad weather at sea. The cantonments are large and well-equipped with modern conveniences and training facilities for the Soviet Marines. The Marines live in barracks. Each cantonment has many barracks, each with several floors. After reporting to his new base and being assigned to one of the barracks, each Marine receives a bed, bedding, a locker, and a night table for his personal items. The Junior officers live in the barracks with up to 8-10 men per room. Senior officers have their own quarters. The same of the parameters of

A long, single-story messhall is located near the barracks. Also, the Marine's tearoom, a small store, medical facilities, and the base club will be located in the barracks' area. The club normally has a sitting room, library, movie theater, and various sports facilities. The base swimming pool (training and recreation) will also be located near the club. Support facilities, including a motor transport garage and parking area and various repair shops will be found in the cantonment. 73

The training facilities in these cantonments are numerous. These facilities consist of four basic types: classrooms, physical training areas, firing ranges and the <u>Desant-o-drome</u>. The classrooms are well-lit and well ventilated. The physical training areas include those sports facilities in the club, the base swimming pool, a PT obstacle course, and a combat obstacle course simulating actual battle conditions. The firing of weapons from small arms to tanks is conducted on several different ranges. Finally, the <u>Desant-o-drome</u> consists of eight specific areas, each for a definite phase of training. These areas are:

- 1. Tank Drome
- 2. Water Drome
- 3. Engineer area
- 4. Area for embarkation training

- 5. Field training areas
- 6. Autodrome
- 7. Water station
- 8 . Small craft naval base.

The specific training which is accomplished in each of these areas will be discussed in the next chapter; however, excellent detailed diagrams and descriptions of these training areas may be found in the <u>Handbook Of Naval Landers</u> by Colonel P.Ia. Beregov. 75

Food, Pay, and Medical. The Chief of the Food Supply Administration, Ministry of Defense is responsible for determining the type and quantity of food consumed by the Soviet Marines. The Administration's Technical Committee works in conjunction with the Ministry of Food Industry and various research institutes and laboratories in investigating, analyzing, and prescribing the various foods. 76 These foods include special foods depending upon location, such as the artic area, and type of training, for example cantonment versus field training. Although specific examples of daily food for Soviet Marines could not be found, the following list of food which is included in the daily diet of a Soviet soldier and a typical daily menu for a Soviet soldier is presented to. at least, show an approximate idea of what a Soviet Marine might eat.

The daily diet would include:

150 grams of mase, 100 grams of fish, 20 grams of outter, 20 grams of vegetable oil, 30 grams of unimatifate, 820 grams of potatoes and vegetables, 180 grams of cereals or macareni, 65 rams of sugar and white and brown bread, and dry jelly and spices.

A typical daily menus

Breakfast - Boiled meat and pearl-barley porridge. Butter, sugar, tea and bread.

Lunch - Cabbage salad. Cabbage soup with meat stock. Stewed meat and buck-wheat. Jelly.

Supper - Fried fish and potatoes. Tea, bread, and sugar. ??

Special holiday meals are also prepared for the Soviet Marines. Although the above list of food would probably be that which is consumed in a contonment, nevertheless, the Soviet Naval Infantry does have field kitchens and bakeries which participate as much as possible in the field training exercises. These field kitchens can provide 2 to 3 hot meals per day for the Soviet Marines. Without the field kitchens, the Soviet Marines exist on rations consisting of porridge, bread, and water. 79

A paucity of information exists as to how much pay a Soviet Marine receives. However, in 1971, a new recruit did earn 5 rubles per month. 80

The Central Military Medical Administration of

the Ministry of Defense has overall supervision of the medical functions within the Soviet Naval Infantry. The Bayal Infantry does have doctors, dentists, para-medical personnel (several years of medical education, but no medical degree), and corpsmen supporting its activities both in the cantonment and in field training. 81 Medical facilities in the cantonments include a ward. first-aid room, physical therapy room, and facilities for dental curpery. 82 During field training, the corpsmen will normally carry bandages, tourniquets, and splints; they do not carry any medicine. 83 Therefore at the lower levets or organization (squad, platoon, and company). only basic first aid can administered. Primary emphasis is placed on evacuating the injured or wounded Marine to higher medical points where he then would receive proper medical treatment including major surgery. 84

Off-duty Activities. During off-duty hours, there are many activities in which the Soviet Marine may participate. The Soviet Marine may read newspapers and magazines or play chess in his club library. He may watch television, a movie or concert at the club. He may use the various sports facilities available on base. Activities, such as orchestra, choir, and drama groups, are available for the individual Marine. A recreational and competitive sailing program exists. Just resting from a

veterans of World War II occupies a large portion of a Marine's free time. 85 In some units, competition in various sports is organized during days off. 86 Soviet Marine: may also be found in local dance halls and sailors clubs during liberty hours or for short periods of leave of absence. 87 Finally, a Soviet Marine is permitted a 10 day leave period during his initial two year service obligation. Marines normally spend this leave period at home with their parents. While aboard ship on cruise, the Soviet Marines may participate in foreign port visits, although these visits (for example to museums) will only last a short time and will be closely supervised by the officers. 88, 89

Morale and Leadership.

Morale. At the beginning of this chapter, traditions were found to have a significant role in developing the spirit and feeling of eliteness within each Soviet Marine. Every phase of Marine life reinforces the basic Marine tradition of the presence of high military spirit, the spirit of attack, audacity in battle, good physical strength, and loyalty to the Communist Party, the Homeland, the People*. One of the most important aspects of this continued reinforcement of the traditions and eliteness of the Soviet Naval Infantry is

the frequent daily use and posting in the barracks of various Marine slogans. These slogans orient and guide the Soviet Marine in his thoughts and actions. These slogans include (slogans used in actual landing exercises will be presented in Chapter 6):

"Remember the basic law of the Marines - Attack, attack, attack. For the Marines, there is no retreat. Only forward, there is your victory."91

"You may die... but your comrade will continue

"If a Marine is surrounded by the enemy, he will fight to his last breath."93

After a few weeks of initial basic training, the Soviet
Marine finally achieves the opportunity to take the oath
of allegiance. This is a momentous occasion for the
young Marine. This is the time when he receives official
recognition as a member of the elite Soviet Naval Infantry.
The spirit of the Soviet Naval Infantry culminates in
this traditional ceremony. The young Marine stands before
a formation of his fellow Marines and the official, much
decorated unit banner and swears his allegiance:

"I(name of the Marine), a citizen of the Union of Soviet Socialist Republics, by joining the ranks of the Armed Forces, take an oath and solemnly swear to be upright, brave, disciplined, vigilant soldier..."

The Soviet Naval Infantry has been characterized as a military organization with high morale. The spirit and high morale are developed from the beginning of a young

Marine's tour of service and are constantly maintained at a high pitch throughout his career, even though the Naval Infantry maintains iron discipline. Further adding to the high morale, prestige and eliteness of the Naval Infantry is the constant receipt of personal decorations and unit awards. A reenlistment rate, higher than the average of the other armed services, certainly has resulted significantly from the high morale and spirit within the Naval Infantry. 96, 97

The spirit of the Soviel Marine is characterized as follows:

- It is a resoluteness, resourcefulness, stubborn courage, and steadfastness.
- It is a sincere combat friendship, readiness to support your friend in battle, rescuing the wounded, and staunchly defending the commander and commissar.
- It is a high self-respect, striving everywhere to be the first and the best.
- It is an amazing fascination of the cheerful self-reliant and successful man.
- It is a huge love toward life.
- It is the striving towards victory. 95

Soviet mources have not indicated any major morale problems existing within the Naval Infantry. Even though the Marines are mostly volunteers and they do have high morale and high esprit de corps, still with the strict discipline, at times harsh training conditions, and the

even the casual observer would estimate the existence of some morale and discipline problems which the leaders of the Marines must contend with on a daily basis. These problems might include carelessness with equipment and weapons, marital difficulties, homosexuality, and the perennial social problem - excessive drinking.

Leadership and the Communist Party. The older. more senior officers provide excellent leadership for their Naval Infantry units. Contributing significantly in enhancing their leadership qualities and stature among the enlisted men is the fact that most of the senior officers participated in combat operations during World War II. The younger junior officers are trained to exercise initiative to be aggressive, and to always set the example for their men. Some problems which have arisen with respect to the junior officers is that of oversupervision by their seniors and the lack of initiative due to the inherent inhibiting effect of the communist system. Some young officers have also been criticized for a lack of adequate training and of technical knowledge. 100 Overall though, the Marine officers are considered to be an elite, well-trained, highly motivated cadre, providing effective leadership for the Marines.

Supporting the officer structure of the Naval Infantry

i. a well- organized, well-coordinated political structure. Every level of command, beginning at the company level, has either a political officer or political section associated with it. In addition to this political structure, the majority of Marines, both officer and enlisted, are members of the Communist Party or the Komsomol organization. 101

The political officers, the local organizations of the Communist Party and Komsomol have several major tasks in supporting the Naval Infantry. They provide psychological and political training for both officers and enlisted on a daily basis. They reinforce the traditions of the Naval Infantry. They help to organize the discipline within the units. 102 They help to strengthen the officer's awareness of his courage and initiative. 103 Finally, they actively promote the various exercises in all segments of the particular operation, helping to ensure bold and decisive actions by the Marines. 104 Thus, a close, continuous contact exists between the Marine officers and their political officers and the various Communist organizations.

Rank Structure and Career Patterns

Officer and Enlisted Ranks. The rank structure of the Naval Infantry is similar to that of the Soviet ground forces, except for the non-rated enlisted men who have

troduced in November, 1971. This rank is similar to the old Russian "ensign" rank or to the D.S. warrant officer rank. The various ranks in the Naval Infantry today are:

Enlisted

Seaman Senior Seaman Junior Sergeant Sergeant Senior Sergeant Master Sergeant

Officer

Praporshchik
Junior Lieutenant
Lieutenant
Senior Lieutenant
Captain
Major
Lieutenant Colonel
Colonel
Major-General

In addition to regular Marine line officers (infantry, tanks, artillery), it appears that the Naval Infantry also incorporates officers with specific branch designations, such as engineer and medical. Within each of the officer and enlisted ranks, there are specialty ratings obtained by passing various examinations. 107, 108

Career Patterns. After the first year of service, the recruit has generally been promoted to the rank of Junior Sergeant. NCO's are selected from those enlisted men who demonstrate leadership potential, motivation, and proper attitude. Candidates for the NCO rank are recruited either directly during the initial induction process or from enlisted men already on active duty. These candidates then spend six months in special

Mayal Infantry unit. Acceptance of this NCO position incurs an additional one year of obligated service. 110

Many enlisted Marines, at the end of their obligated service, re-enlist to continue in their present assignment, or to work in a specialty field, or to become a Praporshchik. Some Marines after finishing their initial tour of service return to civilian life and enter college. After completion of their college training they return to the Marines as officers. Labeled men complete their service requirements, both regular and reserve, at the age of 50.113

Presently, the Praporshchik rank is open for those NCOs who have completed their initial service obligation and are re-enlisting or who are in subsequent tours of service. The initial tour of service for a praporshchik is 5 years, after which the individual may re-enlist for either 3 or 5 year tours. At the age of 45, the proporshchik is transferred to the reserves. A praporshchik may become an officer by holding a specific job for at least 5 years and passing various mility—school tests or by serving 10 years or more in a lifteer's billet at which time, he is given the rank of Lieutenant. Upon transferring to the reserves after 10 years as a praporshchik, the Marine

will receive the rank of Lightenant of Reserves. 114

In the early 1960's, many Marine officers (captain and above) had served in World War II either as an enlisted man or as an officer. 115 Although the following information applies to Soviet ground force officers, it certainly will approximate similar data of Marine officers. 116

Rank	Approximate <u>Age</u>	Minimum Time In Grade for promotion (yrs)	Maximum Age by Rank for Retirement
JrLt/Lt	21-25	2	40
Sr Lt	25-28	3	40
Capt	28-32	4	40
Maj	32 - 35	4	45
Lt Co.	35-42	5	45
Col	42-47	not established	50
Maj - Gen	4 7- 55		55

After researching the various Soviet sources, the following types of jobs for a given rank in the Naval Infantry have been identified:

Seaman:

MRL crewman, machine gunner, tank gun layer, AA gun crew, scout, APC driver, tank driver - mechanic, radio operator.

Senior Seaman:

Engineer, granade Francher operator, rifleman, tank gun looder, motorcyclist, tank driver-mechanic, machine-punner.

Junior Sergeant:

Engineer, section leader, tank crew leader, tank driver-mechanic, anti-aircraft gun leader, squad leader, APC driver, machine-gun squad leader.

Sergeant:

Platoon leader, squad leader, APC driver, tank crew commander, assistant platoon leader, commander of ZSU-23-4 crew.

Senior Sergeant:

Mortar section leader, tank crew commander.

Master Sergeant*

Tank commander, senior enlisted man in company headquarters.

Praporshchik:

"Master Sergeant" of unit, training instructor,
APC platoon commander, assistant for technical
affairs in company, rear service units.

Junior Lieutenant:

Platoon commander

Lieutenant:

Platoon commander(Infantry, tank, engineer, UDT, APC, mortar, communications, MRL, and rear service

units), company commender, political worker.
Senior Lieutenant:

Company commander, platoon commander(Infantry, tank, recon, APC, engineer, artillery, anti-air-craft battery, mortar, and rear service units).

Captains

Company commander (Infantry, tanks, anti-tank, MRL, and rear service units), chief of staff of battalion, political worker.

Majore

Commanding officer of battalion, political officer of battalion, chief of staff of battalion, regimental staff officer.

Lieutenant Colonel:

Commanding officer of battalion or regiment, regimental staff officer.

Colonel:

Commanding officer of regiment or above.

Major General:

Possible commanding general of Soviet Naval Infantry.

Although specific information on the average amount of time
a Marine officer spends in a particular job was not found,
a close approximation would be similar data for Soviet
ground force officers which includes the following: 117

Jr LT/LT	Platoon Communder	(Years)
Sr LT	Deputy Company Commander	- 3
CPT	Company Commander	4
MAJ	Deputy Battalion Commander	3
LT COL	Battalion Commander/ Deputy Regimental Commander	3
COL	Regimental Commander	5
Maj Gen	Commanding General	unknown

In addition to the above listed billets for officers.
the Soviet Marine officer also attends various military schools during his career. These schools will be discussed in detail in the next chapter.

General Expectations.

Before proceeding further on specific details of training, equipment, and organization, let us first consider what general qualities are expected of a Soviet Marine as elucidated by various Soviet sources.

lently trained. He must have the combined qualities of a soldier on land and of a sailor at sea. He must not be seasick, but must be confident and feel at home when operating with the navy. A Marine has high moral and combat qualities. He has poise, emotional stability, courage, and will power to resist any danger and to negotiate any obstacle or hardship under all types of adverse

conditions.119

A Soviet Marine and to exercise initiative, resourcefulness, decisiveness, and determination; since, most of
the time in combat, he will be operating alone or in small
groups. 120 He is characterized by his during, boldness,
steadfastness, admoitness, agility, endurance, and idealogical convictions. 121 Finally, in combat he exhibits
strunchness in the defense and crescendoing enthusiasm
and vigor in the attack.

Of course, the question is - how does he develop these qualities? To answer this question, the Marine's training and education will now be considered.

Chapter 3

TRAINING And EDUCATION

This chapter will examine the specific training and education which a Soviet Marine receives. Specific areas presented will include pre-induction, initial post-induction, individual and unit training, physical training, political training, and officer training.

Pre-Induction Training

As pointed out in Chapter 2, pre-induction training consists of two major areas - the basic 140 hour program conducted during the ninth and tenth years of secondary school (the last two years); and the specialist training conducted by the various DOSAAP organizations.

Basic Program. The basic secondary school program of 140 hours is divided into four specific areas - 33 hours covering the demands of the oath of allegiance and military regulations, 41 hours on military weapons; 31 hours on specialist training; and 35 hours of civil defense training.

More specifically, the general training schedule for the ni..th and tenth year is: 122

Subject Ninth grade		Number of Hours	
Characteristics of the Armed Forces Regulatio Firing Instructions Tactics (platoon and c	ris		10 5 10 6

Drill Civil Defense	Total	4 35 7 0
Tenth grade		
Characteristics of the Soviet Armed Armed Forces Regulations Firing Instructions for Weapons Tactics (platoon and company level) Drill Equipment and Armament	Forces	10 8 31 11 5
		70

In addition to this 140 hour program, DOSAAF has also incorporated a required 80 hour physical training program for all Soviet youth. Furthermore, between the ninth and tenth grades, the Soviet teenagers attend a 5-day camp which is normally located on a local military base. At the camp, emphasis is placed on tactical field ex sises (30 hours) and weapons firing exercises. Athletic events, hikes, political instruction, and inspections are also conducted during the camp. 123

In the weapons training, an individual is given instruction on the pistol, automatic rifle, light machinegun, hand grenade, and anti-tank grenade. This instruction includes basic nomenclature and characteristics, care and maintenance, and firing techniques for each of the weapons. Instruction on military topography is also found within the basic program. Except during the summer camp, there is no is mall political indoctrination.

Thus, this program provides basic practical military skills and the tachnical training introduces the student to the rudimentary knowledge and habits required in a specific specialty, such as a driver or radio operator.

Specialist Training. After a student has completed his 2 year basic training program, he is eligible to participate in one of the various specialty training programs conducted by the numerous DOSAAF organizations. The Soviet Naval Infantry requires a young man to already possess basic training in a specialty - such as in tanks; artillery; driving APCs, trucks, and automobiles; engineering; and radio communications. 125- before he becomes a Marine. Thus, the DOSAAF training is an essential part of the training and education process, if a young Soviet wants to become a Marine. It appears that the most popular DOSAAF organizations used by future Marines are the naval, aerc, motorcycle, and radio clubs. 126 The naval clubs (DOSFLOT) provide instruction in seamanship, naval discipline and traditions, communications, sports - swimming and aqualung diving, small arms firing, and political subjects. 127

The future Marine can also receive training from the DOSAAF organizations in many other areas including vehicle mechanics, parachute jumping, and marksmanship. More advanced training is available in navigation, flight training, radioelectronics, and vehicle operations and

the most important subjects that a future Marine should tearn is knowing how to swim. In addition to the various naval clubs, he can obtain swimming instruction from the OSVOD organization. 129

Initial Post-Induction Training

After reporting to his new base and receiving his military clothing and equipment, the Marine recruit, as a member of a recruit training unit, is ready to begin his military training. The first phase of this training is the initial post-induction or basic "boot camp" training. This basic training generally lasts 4 weeks. 130 This period is reduced to 1 or 2 weeks if the Marine has had extensive pre-induction training or it is extended to 2 or 3 months if specific additional skills are required for the billet to which the Marine will be assigned. 131

During this basic training period, the Marine studies military regulations, the concept of military life, and the description of his military duties. He takes various tests to determine his proficiencies and skills. He must undergo special training in order to develop his strength, endurance, and dexterity. This special training includes hand-to-hand combat and the running of the obstacle course. He also learns basic drill. During this period, each Marine receives his

individual weapon - a pistor, automatic rifle, light machine-gun, or an antitank grenade launcher. 134 Time is then spent training the Marine to fire his weapon. Throughout basic training, the recruit receives political training with emphasis on the traditions of the Naval Infantry and the work of the Communist Party.

Marine takes the oath of allegiance and then is assigned to a specific billet within a unit. This assignment will be based upon the results of the aptitude tests which he took, the pre-induction specialty training which he received, and finally the desires of the individual Marine. Thus his regular military work begins. He is assigned to guard duty, receives more individual training, and now participates in unit training. 135

As indicated previously, those individuals who have been selected for training in a specialty or for training as an NCO report directly to the respective school for up to 6 months of technical or leadership training. After completing this training, the specialist or NCO is then assigned to a unit.

Individual and Unit Training

Once a Marine recruit has completed his initial basic training, has accepted his oath of allegiance,

and has been assigned to a unit, he then begins special individual and unit training. The Soviet Marine is trained to operate in limited and general war, with or without the weapons of mass destruction. His training includes joint and combined training with Soviet army, aviation, naval, and airborne units and with units of other Warsaw Pact countries. Thus, the Soviet Marine has become highly skilled in airborne, helicopter and amphibious operations. 136

The training which a Marine receives is basically the same training which a Soviet ground forces soldier in a motorized rifle battalion receives, plus naval training (the Soviet Marine must feel equally at home on land and at sea). This training consists of five general categories - field, weapons firing, naval, physical, and political training. Although there are various billets in the Soviet Naval Infantry requiring specialized training, such as tank and artillery operators, engineers, and divers, the primary concern of Naval Infantry training is to train every Marine as a Desantnik in a naval Desant (see Appendix A), in other words to be a soldier in an amphibious landing.

In order to develop the various traits and characteristics of a fighting Marine (as mentioned at the end of Chapter 2) during a Marine's career, the Naval

Infantry conducts extremely rigorous, realistic, and detailed training. Individual training programs are tailored to existing weather and terrain conditions within the various naval fleet areas. 138 The Marines are trained to fight at night as well as during the day. Finally, the Naval Infantry emphasizes small group and individual training since, as they feel, the Marine must exercise a large degree of initiative and independent action on the future battlefield. Thus, each small unit is instilled with a sense of mutual support amongst its members and is formed around the individual who has distinguished himself by his enthusiasm and initiative. 139

The Naval Infantry uses various methods to conduct their training. These methods include oral and written lessons, lectures, drills, demonstrations, and exercises. These exercises may be small daily training classes or due to their large scale they may be large scale operations held several times during the year.

Appendix A describes the difference between these types of exercises. The <u>Uchenie</u> form of exercise will be discussed in detail in Chapter 6. At this time, the specific types of daily training will be discussed.

Training in the Cantonments. Those Marines who are basic infantrymen participate in an exhaustive

training program during their career consisting of basic and special infantry subjects, shipboard training, and amphibious landing training.

The Marine infantryman learns to expertly fire his individual weapon - an automatic rifle, pistol, light machine gun or grenade launcher. He receives instruction in the care, cleaning, and maintenance of his personal equipment and weapon and other equipment and weapons belonging to his unit. He is trained in bayonet and knife fighting, in the use of hand grenades, in basic radio procedures, in foxhole digging, and in the proper techniques of camouflage. He learns how to read a map in order to orient himself in unfamiliar terrain. He learns how to operate and survive in water while still wearing his clothing and carrying his equipment and weapon. 140 He studies the Order of Battle of his enemies. 141 They also teach him to drive a car. He participates in drill, parades (specially selected Marine units participate in the Moscow parade each November 7th), 142 and on long marches. He also participates in various physical and political training.

Special training which a Marine receives includes parachute jumping, alpine clumbing, 143 artic training, fighting single-handedly against a tank, working with demolitions and mines, and overcoming obstacles and

country on the beach. The Morine receives training in country unit tactics, including operations in snowy or waspy terrain; CBR warfard; coordinated operations with tanks and artillery; helicopter assaults; 144 naval punfire; and close our support. Finally, he learns how to conduct offensive operations in order to seize beaches and naval ports and to force water obstacles. He also defend a coastline.

To support and reinforce the above type of training, each cantonment has a combat obstacle course which provides a realistic training device for the Marines. The Marine must overcome various obstacles including high barricades, burning buildings and water-filled trenches. Noise and light effects are provided for more realism in the form of explosions, smoke, and firing of weapons. 145 furthermore, in order to take advantage of previous experiences in producing better training results, the Marines carefully study the Naval Infantry experience in World War II and in recent landing exercises. Each exercise in which a Marine participates is thoroughly analyzed before and after the completion of the exercise. This helps to provide a better understanding of the requirements of the exercise and then an understanding of the positive and negative results of the exercise. 146

In addition to the infantry oriented subjects and before training begins with the Soviet Navy, each Marine must learn the characteristics and design of the various types of amphibious ships and the equipment on board each ship. He must learn naval signals. Each Marine also learns to steer, control, and handle the various small naval landing craft and boots. 147 Special training on ships, training for amphibious operations, physical training and political training will be discussed in later sections of this chapter.

Specialist Training. Within the Naval Infantry, there are various billets which require specialized training. In addition to receiving training as a Marine infantryman (although due to time constraints, these individuals do not participate in all of the basic infantry training program) these Marines must also be trained in their specific job. Some of the billets in the Naval Infantry, requiring extra training include drivers for tanks and APCs; tank crews; artillery crews; reconnaisance, engineer and underwater demolition personnel; snipers; anti-tank and anti-aircraft weapon crews; and various rear support personnel.

Tank training includes a special driving and handling course in order that the tank driver can handle the tank on land, on an amphibious ship, and in

rough seas. Training is confucted in both amphibious and non-amphibious tanks. Amphibious tank crews also train to fire their main tank gun while affoat, in addition to normal firing on land. Tank training is conducted in the tankdrome and waterdrome within the cantonment. 148

Drivers for APCs receive the same type of training as tank drivers with emphasis on manuevering in the water. Their training is done primarily in the water-drome. Artillery crews receive training in driving the self-propelled vehicles, as artillery forward observers, as topographers, and as artillery fire-direction computer operators. Artillery crews are trained to operate their weapons in battery or as an individual weapon. 149

combat engineers and underwater demolition personnel receive extensive training in demolitions and mines. The combat engineers concentrate on destroying obstacles on the beach, breaching minefields, or building defensive obstacles. The underwater demolition personnel are concerned only with destroying the underwater obstacles near the beach prior to an amphibious landing. This type of training takes place in the engineerdrome within the cantonment. 150

Initial sniper training lasts for approximately two months, afterwhich periodic training is conducted on the cantonment's firing range. The sniper is trained

to shoot at various types of targets including officers and helicopters. 151

Primary training for the anti-tank and anti-air-craft weapons crews is done with the use of simulators. 152 Driver training is also provided for the self-propelled anti-aircraft gun.

Training for rear support units includes courses in automobile and truck driving, repair and maintenance; food preparation; medical service; repair of shoes, clothing, and equipment; and POL management. The Marines in the rear support elements do participate in the amphibious landing exercises. 153

Special Training on Amphibious Ships. Besides the training conducted in the various phases of an amphibious operation involving the intimate training of the Marines with the sailors, the Marines conduct other special and significant training when they are present on board ship. The Marines together with the sailors train thoroughly and strenuously in subjects related to shipboard life. Since Marines do participate in many long sea voyages with the Navy, they must become familiar with life aboard ship in order that they feel at home while at sea. 154

On board ship, classes are conducted in naval signals, characteristics of the equipment and weapons on the ship, knot-tying, amphibious landing and beach conditions, the handling of small craft and boats, and political indoctrination. 199

Marines participate in daily ship drills. They train and play an active, important role in damage control drills. Marines are assigned to various jobs on the ship, including naval gun crews, anti-aircraft gun crews, signalmen, and lookouts. 156

Training in Amphibious Operations. The amphibious landing is the most complicated form of training for the Soviet Marine. He must master the skills required for an amphibious landing in day and night, in all types of weather, and in all types of terrain. In training for an amphibious operation, the Marine studies and participates in every aspect of the four major phases of the operation. 157

These four phases are:

1. Embarkation of Marines and equipment.

2. Sea voyage to the target area.

- 3. Debarkation, landing, and battle for a beachhead.
- 4. Combat activity after establishing beachhead.

The Marine's studies consist of three stages. In addition to his normal tactical, firing, and physical training, he first must gain complete knowledge of the characteristics and capabilities of the amphibious ships and landing craft; second, he conducts daily practical training in the <u>Desant-o-drome</u> located on his cantonment; and,

third, he will maintain and increase his amphibious landing capabilities by participating in actual tactical landing exercises, both small and large scale. 158

During his daily training in the <u>Desant-o-drome</u>, he is able to practice embarkation and debarkation procedures. Also within his cantonment he can practice the tactical procedures required for gaining the beachhead and follow-on action. A Marine's total training program is oriented towards and culminates in the successful completion of the amphibious operation. In addition to conducting their own landing exercises, the Soviet Marines participate in many Warsaw Pact landing exercises, particularly in the Baltic Sea.

Physical Training

To help prepare the individual Marine, both physically and psychologically, to fulfull the demands of the various training requirements and to be prepared for actual combat, the Naval Infantry employs an extensive physical training program in conjunction with the normal military training program. Facilities for both required organizational and off-duty physical training are available in each cantonment.

Each day, the physical training begins with one hour of basic exercises. In addition, each Marine prior to performing guard duty engages in 10 to 15 minutes of

warm-up exercises. Even when the Marines are on board ship, daily exercises are not forgotten. On each ship a thirty minute period of intensive exercising is conducted twice a day by the Marines. 159

Required physical training includes instruction in swimming, diving, sambo (a form of hand-to-hand combat for self-defense without using any weapons), gymnastics, wrestling, and the obstacle course. Sambo, which is the most popular sport among the Marines, and the obstacle course comprise 40% of the physical training program. 160

One of the most difficult obstacles is the "tower of courage". This obstacle consists of a 12 to 15 meter tower with a small platform at the top and a platform at the 3 to 5 meter level. Marines are required to climb to the top using a 5 meter wide rope ladder. To get down from the top, a Marine must hang onto a 35 centimeter long metal pipe which then slides along a slanted rope to the ground. The Marines are also required to jump to the ground from the 3 meter level platform. Thus, the purpose of this obstacle is to acquaint the Marine with the feeling of descending and landing, similar to that found in parachute jumping. 161

Heavy emphasis is also placed on swimming and diving while a Marine is fully clothed and carrying his

equipment and weapon. This orients the Marine to conditions he might expect to encounter during the amphibious assault.

Another important physical program in which each Marine participates is the Military Sports Complex. This program generally consists of five events which are:

- 1. Gymnastics
- 2. 100 meter run
- 3. 3 kilometer cross-country run
- 4. A 6 kilometer skiing or marching race
- 5. Swimming in conjunction with diving.

In addition to these five events, the Marines also compete in three more which are;

- 6. Grenade throwing for distance and accuracy
- 7. Obstacle course run
- 8. Rowing a six-man skiff for 2 kilometers or long jumping. 162

As with all sports, a Marine can earn various awards and degrees in the Military Sports Complex depending upon his level of expertise.

To promote attention to and participation in the physical fitness programs, each Naval Infantry corpany has a sports committee and several sports sections which provide competent instructors in areas such as swimming, acrobatics, weight lifting, boxing, and wrestling. Thus, the entire physical training program is organized to produce a beneficial effect on combat training and to develop a team spirit. This spirit is developed through competition among the units in many of the sports. Instead of competing

in the various sports in a PT uniform, the Marines wear their normal working uniform during all physical training. 163

Many of the facilities for the required physical training programs are also available for each Marine to use during his recreational time. In addition to the many sports already mentioned, a Marine can participate in classical and free-style wrestling and rugby. Trampolines are also available for use. 164

Political Training

To say that the Communists help to train the Marines would be to totally understate the effect and influence of the Communist Party upon the Naval Infantry. Political and psychological training is extremely well organized and impinges upon every aspect of a Marine's life including every phase of his training. Partypolitical work is considered to be the most important means to strengthen the political-moral state and the military discip ine of each Marine. The primary goal of the political work within the Naval Infantry is to ensure the high state of military training and readiness of the Marines in order that they can complete their military assignments in a timely and orderly fashion. 165 The various qualities which a Marine is to possess, as described at the end of Chapter 2, are developed through this intensive political and psychological indoctrination cach Marine. The political officer or section of cach Naval Infantry unit is primarily responsible for this training; however, he is helped to a considerable degree by the other officers within the unit, the majority of whom already belong to the Communist Party and by local Communist and Komsomol organizations. A Marine's political training consists of two general categories - that training which he receives on a daily basis and that training he receives during field exercises.

Formal classes in political training account for 10 to 15% of the daily schedule. These classes include instruction in the development of the unit's battle traditions, communism, history of the Communist Party and the armed forces, and the foreign and internal policies of the Communist Party. Methods of instruction vary from the use of films to formal seminars and/or individual discussions. Guest lecturers, including present party members and veterans of World War II, are used to enhance the political education of the Marine. 166

Field training is considered to be the best school for psychological training. No matter whether the Marines are on soard ship or in the field, political training is continuous throughout the exercise. To emphasize the heroic deeds of former Marines, many of the exercises

are conducted at historical landing sites of World War II. 167 Every exercise is meticulously promoted through daily practical studies, speeches, and meetings with the Marines. The officers and political workers painstakingly analyze for the Marines the requirements of the exercise and lessons learned from previous exercises. 168 All of this political training is geared to achieve bold and decisive action from each Marine during the exercise. 169

Training and Education of Officers

Secondary School. The majority of future Marine officers receive the normal, non-military secondary school education and training which includes the 140 hour basic program, camp program, and the DOSAAF specialized and advanced training program. These programs have been discussed at the beginning of this chapter.

A small number of future Marine officers receive their secondary education from the Suvorov and Nakhimov schools. These students receive the normal secondary school education within a general military atmosphere. This training also includes summer camps or cruises. Within this program emphasis is placed on physical training including sports, marksmenship, and military bearing. 170

Military and Higher Military Schools. A Marine officer candidate may attend a variety of military colleges depending upon previous training and his particular

coreer desires. In addition to the basic academic foundation of mathematics, chemistry, physics, foreign language, geometry, and dynamics, each achool provides instruction in a particular military field such as command and armour, artillery, communications, pilot training, politics, engineering, transportation, sapply, and naval training. 171 In general, the education and training program consists of 70% military subjects and 30% general education subjects. 172

The military training provides a thorough understanding of the various aspects of modern tactics. Specific training includes instruction in communism, maintenance and operation of equipment, weapons familiarization and firing, physical training, CBR warfare, civil defense, military topography and field engineering. 173 The Frunze Higher Naval School also provides training in deck seamanship, shiphandling, navigation, ordnance, and electronics. 174

At present, there are no military colleges which specifically train future Marine officers. However, in 1970, a special course was organized at the Kaliningrad Higher Naval School for future Marine officers. This course included instruction in the organization, equipment and armament of the Naval Infantry, the history and traditions of the Naval Infantry, the characteristics of amphibious ships, basic small unit tactics, and all phases of an amphibious landing. The officer-candidates

participate in daily training exercises. In 1970, they even participated in the amphibious latting during the naval exercise. Okean-70. 176 Although specific information concerning Marine oriented courses at other schools was not found, this author feels that it is very likely that such courses do exist in other colleges, particularly at the various Higher Naval schools.

Post Commissioning Training. Although some Marine training does exist at naval colleges, the majority of the newly commissioned Marine officers from the general troop military colleges have not received any special Marine training. Therefore, one of the major tasks within the Soviet Naval Infantry is to provide adequate training for the junior Marine officers, so that they will become effective combat leaders. The commanding officer of the young Marine lieutenant has the responsibility to educate and train him in the skills of amphibious warfare. 177

The Marine lieutenant will receive special instruction in map reading, reconnaissance techniques, familiarization of amphibious ships, small boat handling procedures, amphibious techniques, naval terminology and weapons technology. The young officer will learn to shoot all weapons used by the Naval Infantry. He will receive extensive physical training including sambo, swimming, and parachute jumping. 178

Within the daily training program, emphasis is placed on developing the young officer's ability to correctly analyze and develop various combat scenarios.

The combat experiences of the Naval Infantry in World.

War II and recent amphibious exercises are used as examples for analyzing both mistakes and correct procedures. 179

Three methods are used to accomplish the training of young officers. First, the commanding officer organizes and supervises a plan of self-study for each Marine lieutenant. Second, special formal training classes are conducted on a daily basis. Finally, the young officer will participate in an on the job training program, which will include amphibious landing exercises. The lieutenant will be continually evaluated during his training program by his commanding officer, so that he can correct his deficiencies and progress in his development as a leader of Soviet Marines.

In addition to the training which a Marine lieutenant receives from his unit, there is some evidence that young Marine officers attend a special training program conducted at a base in Viborg. However, the length of this program and when the officer attends are unknown. 181

Advanced Education. After a Marine officer has been on active duty for two years, he is then eligible

to attend an advanced military school. This program consists of 1 year of classes which update and improve the officer's qualifications in his primary field. 182

During the middle of his career, a Marine officer, if selected, may attend one of the military academies or institutes. There are two types of military academies - combined arms which have a 3 year course and special military/technical education which have a 5 year course. Military institutes have a 3 year course of instruction. The education received in these academies and institutes trains an officer for higher level staff and command billets.

Finally, the very senior Marine officers (of which there are very few) may, if selected, attend the General Staff Academy or Advanced Naval Academy for a 1 year course. 183

Chapter 4

EQUIPMENT And WEAPONS

In this chapter, a general analysis of equipment and weapons used by the Soviet Marines will be presented. Information for this analysis was primarily obtained from Soviet sources, particularly Krasnaia Zvezda and Morskoi Sbornik. Annotation will be made where Western sources indicate that certain equipment and weapons are used by the Soviet Marines, whereas research for this paper failed to uncover such evidence in Soviet sources. Appendices C and D provide general characteristics of the equipment and rooms. Three Western sources were used for the info.ion on general characteristics. These sources were: The Armies of the Warsaw Pact Nations by F. Wiener, FM 30-40 Handbook on Soviet Ground Forces by the Department of the Army, and The Soviet Motorized Rifle Company by DIA. No attempt was made to identify equipment and weapons of other Warsaw Pact countries.

Equipment

Individual Equipment. Each Marine, carrying a rifle, has a detachable bayonet-knife. Skiis and snowshoes are issued for winter training. 184 Marine officers utilize binoculars and small signal flags during exercises. They also have ceremonial swords. 185 Individual CBR equipment includes the ShM or ShMS gas mask and the OP-1 protective

sui t. 186

Unit Equipment. Various types of engineer and reconnaisance equipment are used. Rubber boats, climbing equipment, and underwater breathing equipment is available. Radio equipment includes the R-113 or R-123 vehicle mounted radio set. Man-packed radio sets include the R-107 or R-126. 187

Vehicles. The designations of most vehicles were not found; however, various sources indicate the use of recon-patrol and engineer vehicles. Various types of trucks are used to transport radio equipment, repair equipment, ammunition, water, food, and fuel. The URAL-375 and GAZ-63 trucks are used to transport multiprocket launchers. The M-72 motorcycle is also used by the Marines. 189

Amphitious Vehicles. Soviet sources indicate the use of the K-61 and the PTS-M. Western sources further indicate the use of the GAZ-46 (MAV), BAV, and the GAZ-47 (GT-S).

Weapons

Small Arms. The PM Makarov pistol is carried by the officer. 191 The most common rifle used by the Marines is the AKM Kalashnikov assault rifle. Each Marine squad has one RPK Kalashnikov light machine gun. At the company level, the Naval Infantry has the PK (with bipod

or the PKS with tripod) Kalashnikov general purpose machine on. 192 The Marine snipers use the Dragunov (SVD) sniper eifle. Various types of anti-tank and anti-personnel hand grenades are also used. 193

Anti-tank Weapons. The primary squad level anti-tank weapon is the RPG-7 grenade launcher. 194 The B-10 recoilless anti-tank gun is used at the battalion level, although it may have already been replaced by the SPG-9 anti-tank gun. 195

Although evidence of specific types has not been found, several Soviet sources indicate the use of the PTURC (anti-tank controlled rocket shell). This weapon has been described as mounted on self-propelled amphibicus vehicles and as man-packed. The anti-tank weapon which fits this description is the AT-3 Sagger. The AT-1 Snapper and AT-2 Swatter are also anti-tank weapons, which are found only on vehicles, which may also be used by the Marines. One Western wource indicates the use of the AT-3 Sagger by the Soviet Marines.

Anti-aircraft Weapons. Initially, the ZPU-4 anti-aircraft mount was used and still may be in the inventory. However, today the primary anti-aircraft weapon is the ZSU-23-4. Western sources also indicate the use of the SA-7 and the SA-9 missile. 200

Mortars. The 82 mm mortar was used by the Marines

in the early 1960's 201; however, this may have now been replaced by the 120 mm mortar, as indicated by one Western source. 202

Artillery. Soviet sources did not indicate specific types of standard artillery weapons. However, several sources stated that multi-rocket launchers are the Naval Infantry's primary artillery. Two types of multi-rocket launchers were identified - the 122 mm BM-21 mounted on the URAL-375 truck 204 and the 146 mm BM-14 mounted on the GAZ-63 truck. The older BM-14 may have been replaced by the BM-21. Western sources indicate that the Soviet Marines also use various towed artillery, including the 122 mm howitzer. The BM-14 mounted on a ZIL-151 truck was also mentioned in a Western source. 207

Tanks. The PT-76 amphibious tank is the most common tank used by the Marines. They also use the T-54 and T-55 medium tanks. T-62 tanks may be replacing the older medium tanks. One Western source indicated that the PT-85 medium tank was also used. 209

Armoured Personnel Carriers. The BTR-40, BTR-152, BRDM-2, 210 BTR-60P, BTR-60PA, and BTR-60PB have been identified from Soviet sources as those APCs used by the Marines. 211

Several Soviet sources indicated the use of both wheeled and tracked APCs. 212 All of the above mentioned APCs are wheeled. Therefore, the Marines may also be using

the treeked BTR-50 vehicle of also indicated by various Western sources. Furthermore, the BMY-76 FB may now be replacing the claer AlGe. 113

lacatification of Equipment and Weapons

When using various Soviet sources to identify equipment and weapons used by the Soviet Naval Infantry. one convenient recognition aid was found to be helpful. The Soviet Marines place the following insignia on all of their large equipment and weapons:



Chapter 5 AMPHIBIOUS SHIPPING And MILLTARY AIRCRAFT

Amphibious Shipping

In order to conduct amphibious operations, the Soviet Navy supports the Naval Infantry with various classes of landing ships and craft. The types of landing ships include the Alligator, Polnochnyi, Vydra, MP-2, MP-4, MP-6, MP-8, MP-10, SMB-1, and Ropucha class ships. T-4 landing craft is the only type of landing craft identified. Several of the other Warsaw Pact countries also use various types of landing ships and craft. Poland uses the Polnochnyi and Ropucha class of landing ship. The German Democratic Republic uses the Robbe and Labo class of landing ship. Bulgaria uses the Vydra class and smaller landing craft.

The total number of each class for the Soviet Union is: 214

	Northern	Baltic Sea	Black Sea	Pacifi	Total
Alligator Polnochnyi MP-2 MP-4	2 12	3 15	4 18	5 15	14 60 8 15
MP-6 MP-10 Vydra	15	16	30	20	8 5 10 35
SMB-1 Ropucha T-4	0	3	0	2	nknown 5 100

Detailed characteristics and diagrams for each chaos of ship are provided in Appendix E. Since the incroduction of the "arroraft carrier" into the Soviet Navy, speculation has rise n as to the possible use of these "aircraft carriers" in amphibious operations. The Naval Infantry is also testing various hydrofoils and air cushion vehicles for use in an amphibious environment. Therefore, information on the "aircraft carriers", hydrofoils, and air cushion vehicles is also provided in Appendix E.

Before considering the other Warsaw Pact countries, it should be pointed out that some authors have indicated that several ships have been converted to amphibious command ships. These ships provide the necessary facilities for the command and control of amphibinus exercises by the joint Marine/Navy command. 216

The numerical data on amphibious ships and craft for the other Warsaw Pact countries includes: 21?

Poland - 23 Polnochnyi and 2 Ropucha. The Polish have also begun to use a small landing craft, the Kuter Desantowy

German Democratic Republic - 6 Robbe and 12 Labo.

Bulgaria - 10 Vydra and 10 MFP

Air Cushion Vehicle Tachnology

In 1967, the Soviet military first showed an interest in using air cushion vehicles for military purposes. The initial ACV which they rested was the MC-01. 218 In 1971, the GUS was publically displayed. The GUS is presently the only ACV in full production and operational use. The Naval Infantry is using this vehicle extensively in operations, particularly in the Baltic Sea area. The lurgest ACV presently in operation is the AIST. Today the Soviet Union has the largest operational ACV fleet of any country. 219

Several Soviet articles have illustrated the use of these ACV in amphibious exercises. 220, 221 In 1975, the Soviets released a training film showing both the GUS and AIST in an operation with the Soviet Marines. In the film, a group of Marines exited from the GUS, while a main battle tank(T-62) was off-loaded from the AIST. 222

Appendix E contains imformation on the characteristics of these various ACVs.

Military Aircraft

The only mircraft which will be considered in this report are helicopters and V/STOL mircraft. Many Soviet sources have indicated that the Soviet Marines do use helicopters and do participate in helicopter assaults during amphibious operations. 223, 224, 225 Pictures of both a Mi-4 and a Mi-6 with Soviet Marines have been published in Soviet articles. 226, 227 Various

naval and military helicopters are available for use by the Marines, since they do not have any helicopters within their own organizational structure. These include the Ka-25, Mi-1, Mi-2, Mi-4, Mi-6, Mi-8, Mi-10, Mi-12, and Mi-24. In addition, V/STOL aircraft have begun operating on the new Kiev aircraft. These aircraft could be used to support amphibious operations. 228, 229

Appendix F provides information on the characteristics of these various helicopters and aircraft. 230, 231, 231, $\frac{230}{230}$, $\frac{231}{230}$,

AMPHIBIOUS TREAS INC. LANCOISIUS

Chapter 3 discussed in different types of training -Zaniatie and Uchenie (see also Appendix A). The various types of training accomplished during the daily Zaniatia were also presented. The training as presented in Chapter 3 culminates in the conduct of various sized amphibious exercises or Uchenie in which the Naval Infantry participates throughout the year. These exercises may be company give, battalion or multi-battalion size; they may be joint exercises conducted with the army, airborne and, of course, the navy; and they may also be combined exercises involving other members of the Warsaw Pact. The purpose of this chapter is to present the information available which characterizes each of these exercises. This information will consist of the date of the exercise. 235 the location of the exercise, and general characteristics of the exercise. (including the name of the exercise, countries participating, type and size of units participating, and the use of any special techniques - such as naval gunfire and close air support). Before presenting this material, it is interesting to note one sidelight which has grown out of these exercises. As mentioned in Chapter 2, the morale and enthusiasm of the Soviet Marine is constantly maintained

These sayings are: 236

- 1. Desantu prigotovit'sia k vysadke "Prepare for the landing" as the Marines leave the ship.
- 2. <u>Ura</u> a deep throaty "hurrah" shouted by the Marines as they hit the beach.
- 3. Paloondra "Watch out below", the battle cry of the Marines.

Training Exercises

Dotte L	ocation .	General Characteristics
October, 1962	unknown	Simulate nuclear strike; NGF; use CBR personnel.237
October, 1963	unknown	Simulate nuclear strike: CAS, 238
July, 1964	unknown	Amphibious landing. 239
September 15-20, 196	Bulgarian coast	Soviet, Romanian, and Bulgarian troops, simulate nuclear strike. 240
May, 1965	East German coast	East German. ²⁴¹
May. 1965	Pacific area	Amphibious landing. 242
June. 1965	unknown	Amphibious landing. 243
November,1965	(Pacific area)	Simulate nuclear strike; helicopter assault.244
November, 1965	Baltic area	Amphibious landing. 245
1965	Black Sea area	Soviet, Romanian, and Bulgarian troops. 246

. 17. One	foliosis: Englisherman	"male of 1"; Howlet, to land that West in the troops of 27
% (J. 190 7	Bings Ser uran	Amphibious landing. PhB
Jona, 1967	East German coast	"Baikal II"; Soviet, Polish and East German troops, 249
July 25, 19 67	near Leningrad	Mock amphibious landing with Polnochnyi ships; each carrying 2 PT-76 and 4 APC.250
August 2 0-27 1967	Bulgarias coast	Soviet, Romanian, and Bulgarian troops.251
Septemi ,1967	Polish coast	Polich troops using small motorboats.252
October, 1967	Polish const	"Oder"; Polish troops. 253
July 16, 1968	Polish coast opposite Born-holm Island	"Sever"; Soviet, Polish, and East German troops; landing of 3 battalions; CAS; NGF; largest exercise to date.254
July 19, 1968	Rybachi Penin- sula, northern area	"Sever": Soviet troops, possibly to include Marines from Baltic Fleet.255
August, 1968	unknown	Amphibious landing. 256
September,1968	Czechoslovakia	Naval Infantry units from Baltic Fleet participate in the invasion; 257 may have also been used in airborne units.
October, 1968	Northern and Baltic areas	Link-up manuevers after Czech invasion. 259
July, 1969	Baltic area	Amphibious landing. 260
July, 1969	Northern area	Amphibious landing. 261

	prior to September, 1969	Soviet const	"Kvartet"; Soviet and Folish troops. 262
	September, 1969	Nediterr ancas	Soviet, UAR, and Syrian navies. 203
•	September, 1969	Polish coast	"Oder-Neisse"; Soviet, Folish, East German, and Czech units including Marines, army, and air- borne; NGP, CAS; simulate nuclear strike; helicopter assault; use engineers and UDT; 3 battalion landing plus 1 reserve army bat- talion. 264
	Saptember, 1969	Black Sea area	Amphibious landing. 265 Moskva may have been used.
	November, 1969	Baltic sea	Amphibious landing. 266
	1969	unknown	Naval Infantry artillery defends coast during simulated landing. 207
	1969	Pacific area	Amphibious landing.268
	March, 1970	Dvina River area	"Dvina"; possible parti- cipation by Soviet Marines.209
	April 27-28 1970	Rybachi Peninsula	"Okean-70" Soviet Marines in both offensive and defensive positions; 2 battalions conventional landing; NGF, CAS, engineer; helicopter assault; 24 landing ships plus Leningrad participate in operation; largest Soviet landing; supported by rear echelon units.270
	April 27-28 1970	Island in Baltic Sea	"Okean-70"; battalion of Soviet Marines and battalion of naval cadets; numerous landing sites; simulate nuclear strike; CAS; sup- ported by rear echelon units.

April, 1970	Black Sea area	Amphibious landing.272
April. 1970	near Vladivostok	Amphibious landing. 273
July 25, 1970	ncar Sevastopo. and Vladivostok	l Demonstration landings. 274
July 26, 1970	Khimkinskii Reservoir near Moscow	Demonstration landing.275
October 17, 1970	East German coast	"Brotherhood-in-Arms"; Soviet, Polish, and East Germans conduct regimental size landing; supported by East German, Bulgarian, and Czech paratroopers; multi- objective assault including beach, airfield and seaport; NGP, CAS, helicopter assault; largest amphibious exercise to date, 276
December, 1970	Pacific	Amphibious landing. ²⁷⁷
May. 1971	Northern area	Amphibious landing, heli- copter assault.278
June 14, 1971	near Odessa in Black Sea	"Yug"; Soviet brigade size landing; Leningrad participates in landing; CAS, NGF, engineers, UDT; helicopter assault; army and airborne units also participate. 279
July, 1971	Pacific area	Battalion size landing. 280
August, 1971	Baltic area	Amphibious landing. 281
prior to March, 1972	unknown	Amphibious landing. 282
Spring, 1972	unknown	Amphibious landing. 283
October, 1972	Baltic area	Amphibious lunding with NGF and CAS. 284

1972	Polish const	"Wiesma"; Polish troops. 285
February, 1973	Black Sea area	Amphibious landing. 286
December, 1973	unknown	Amphibious landing. 287
November, 1974	unknown	Amphibious landing. 288
February 16, 1975	near Zealand Island in Balti Sea	Amphibious landing. 289
April, 1975	Norwegian Sea	"Okean-75". seven merchant ships with amphibious units (only mention of amphibious activity during this exercise). 290
prior to December,1975	Northern area	Amphibious landing using NGF and MRL.291
February 23, 1976	unknown	Battalion size amphibious landing.292
September 9-16 1976	Polish coast	"Shield-76"; Soviet, Polish East German, and Csech troops; 8 landing ships.293
prior to December,1976	Pacific area	Company size amphibious landing.294
prior to December, 1976	East German coast	Brigade size amphibious landings.295
January, 1977	Paltic area	Amphibious landing. 296
February, 1977	unknown	Company size amphibious landing.297
Spring, 1977	Northern area	Amphibious landing: Kiev participates. 298
prior to April, 1977	(Baltic)	Amphibious landing with ACV and helicopter assault:

The Naval Infantry participates in one other form of exercise - deployment of amphibious ships with naval

exercises are conducted during these cruises, it is still a part of the overall training for a Loviet Marine - it is operational experience. Information regarding these deployments is presented in Appendix G.

Chapter 7

COMMAND STRUCTURE

What do the Soviets tell us about the command structure of their Naval Infantry? Virtually nothing, unless you gather bits and pieces of information about name, rank, job description, and location of officers; then assemble and analyze this data (as in a giant jigsaw puzzle); then maybe you might have some very crude and approximate idea of what the command structure of the Naval Infantry is. Before considering data of this nature, let us first consider the very top echelon of command.

Commandant of the Soviet Naval Infantry

Who is this commandant? What is his job? Unfortunately, the only evidence which was found during this research came from Western sources. There was no mention whatsoever in Soviet sources as to who commanded their Naval Infantry. The one fact which Western sources have expounded upon and which appears to be supported in Soviet sources is that the overall operational control of the Marine units assigned to a specific naval fleet area (Northern, Baltic, Black Sea, and Pacific) or a flotilla is the responsibility of that respective naval fleet commander or local ground forces commander (flotilla). Thus, the senior Marine officer in a fleet area is operationally subordinate to the naval fleet commander and not to any

commandant of the Naval Infantry. 300

On the other hand, it is probable that the Naval Infantry does have some form of centralized command. This would be required in order to provide Admiral Gorshkov's headquarters with proper assistance and guidance and also to provide some systematic and uniform control over basic training and doctrine, administration, and logistics within the various and widely separated units. Of course within each fleet area, the Naval Infantry units would be receiving a large amount of logistical support from the Soviet Navy.

ture of the Seviet Navy which includes a Chief Directorate for Naval Infantry as one of the administrative sections under the Chief of the Main Naval Staff. 301 What Soviet Marine occupies this billet? In 1970, one source indicated that Colonel L. N. Roitenburd was the Commander of the Naval Infantry. 302 However, in an article in 1973 and more recently in an interview, Professor John Erickson stated and is convinced that a Major General is the Commandant of the Naval Infantry. 303 Professor Erickson was unable to obtain the name of the Major General during his recent trips to the Soviet Union, although the Soviets insisted that he was a Major General.

Thus the mystery remains as to who is the top

Soviet Marine. At this point, it might be interesting to speculate on one aspect of the command structure and Soviet articles. It appears that the most prolific writer about the Soviet Marines and the one individual who is called upon to answer requests about the Marines in the newspapers is Major General P.E. Mel'nikov (see bibliography and Appendix H). If any of the Soviet authors could be considered the "spokesman" for the Naval Infantry it would certainly have to be Major General Mel'nikov. In addition to many authored and co-authored articles appearing in Krasnaia Zvezda, Major General Mel'nikov was the senior officer in the collective authorship of the "Handbook of Naval Landers" (in bibliography under Beregov), published in 1975.304 This is an excellent handbook, describing the Naval Infantry and amphibious training. It was written as a general guide and textbook for military readers, including the Soviet Marines. Finally of interest, is the fact that in 1970 Major General Mel'nikov was identified as the commanding officer of shore artillery in the Baltic Fleet. 305 At the same time S. Breyer, in presenting his schematic naval command structure, shows the Naval Infantry subordinate to the Coast Defense (shore artillery and air defense) in each of the naval fleets. 306

Officer Command Structure

As initially pointed out, a glant jigsaw puzzle exists in determining the command structure of the Naval Infantry. In order to examine this problem, basic data on the Soviet Marine officers was collected from primarily, Soviet sources. This data includes name of officer, rank and job description, location, and date of information. This data was assembled and is presented in Appendix H. This data was further analyzed to determine specific command organizations (if and where they exist), numbers of officers, and numbers of different types of units and subunits. This data is presented in Appendix I (those officers listed in Appendix H with an asteriisk have not been considered in Appendix I). Obviously, this data base is very incomplete, but it does provide an initial starting point from which the order of battle of the Naval Infantry can be analyzed. This analysis is presented in the following chapter.

Chapter 8

ORDER OF BATTLE

Naval Infantry - the individual Marine; his training; the equipment, weapons, and amphibious shipping which he uses; the various amphibious exercises in which he participates; and who his leaders are, there remains one general area to be analyzed. Appendix H and I presented a very rough sketch of how the Naval Infantry is organized based upon their officer structure. This final chapter will consider in more detail the organizational structure of the Soviet Naval Infantry. The result of this examination will be a proposed order of battle (OOB) for the Naval Infantry. To aid in this analysis, Appendix J was compiled in order to present the views of many Western writers on what they consider to be the OOB of the Naval Infantry.

Regiment or Brigade

In examining Appendix J.1, the first problem that confronts the reader and that must be resolved before further detailed analysis on the OOB is:

What is the highest operational command organization within the Naval Infantry? How is the Naval Infantry, in general, operationally organized in order to complete its missions as directed by the individual fleet commanders?

Among the sources in Appendix J.1, there are three general answers:

- 1. Brigades and battulions
- 2. Brigades, regiments, and battalions
- 3. Regiments and battalions

In resolving this problem, first consider what the <u>Large</u>

<u>Soviet Encyclopedia</u> has to say about <u>Morskaia Pekhota</u>

(Appendix A).

"...consists of units and subunits..."307

Next review the definitions in Appendix A for unit(Chast'), subunit (Podrazdelenie), brigade (Brigada), and regiment (Polk).

Taking into account these definitions, the data found in Appendices H. I. and J. and three Soviet articles 308 which discuss regimental units, this author believes that the basic organizational structure of the Naval Infantry is the regimental structure with subordinate battalions. Thus, it is the regimental commander who is responsible to the fleet commander for the performance of his Marine units. Based on the exploits and fame which the Naval Infantry brigades, regiments, and battalions achieved during World War II. it may be that today's regiments have been assigned "honorific" brigade titles. Specific regimental names or titles were not found, however, Professor John Erickson did indicate during his interview that these honorary titles probably have been assigned to the

units.

Regimental Table of Organization

Several authors have stated that the original Marines in the early 1960's were personnel from motorized rifle units (army) which had been converted to form the Naval Infantry. The Naval Infantry over the years has developed into an organization of its own with an apparent fixed table of organization. Although development and changes have occurred, the Naval Infantry battalion still retains many of the organizational characteristics of the motorized rifle battalion. 310

In formulating the following regimental table of organization, the data in Appendices D. H. I and J was analyzed in conjunction with various tables of organization (Soviet ground forces) found in Appendix K.

Soviet Naval Infantry

Regiment	Officers	Enlisted	
Regimental headquarters and staff platoon	28	32	
3 Infantry battalions	87	1272	
1 Tank battalion (31 PT-76)	28	118	
1 MRL battery (6 x 122mm BM-21)	5	35	
1 SP Anti-aircraft battery (6 x 25U-23-4)	3	24	
1 SP Anti-tank missile battery (AT-3 Saggar, mounted on BRDM)	4	16	
1 Reconnaissance company	4	43	
l Engineer company	5 .	53	

	Total	186	1873
1	CBR Defense Company	1	34
1	Supply company	5	54
1	Maintenance company	3	47
1	Transportation company	5	69
1	Medical company	4	23
1	Communications/Signal Company	4	53

Mortars are assumed to be located only at battalion level.

Other types of artillery were not discovered during this research. The exact location of UDT, beachmaster, food service, and POL personnel could not be determined. It is quite possible that certain of these personnel may belong to other service branches; however, when the Marines conduct exercises, such personnel as UDT always participate in the landing.

Infantry Battalion	Officers	Enlisted
Battalion headquarters and staff platoon	4	9
3 Infantry companies	18	318
1 Mortar platoon (6 x 82mm mortar)	4	46
l Recoilless rifle platoon (3 x 82 mm B-10)	1	17
l Supply and Maintenance platoon	1	18
1 Communications platoon	1	12
l Medical platoon	0	4
Total	29	424
	~ /	764

Tank Battalion

Battalion headquarters had staff platoon		6	Q
3 Tank companies		21	87
1 Supply and maintenance p	latoon	1	18
l Medical platoon		0	4
	Total	28	118
Infantry Company			
Company Headquarters		3	9
3 Infantry platoons		3	90
l Gen eral purpo se machine gun section		0	7
	Total	6	106
Tank Company			
Company headquarters		4	5
3 Tank platoons		3	24
	Total	7	29
Infantry Platoon			
Platoon headquarters		1	0
3 Infantry squads (includes	APC crew)	0	30
	Total	1	30
Tank Platoon			•
Platoon headquarters		1	0
3 Tank crews (3 PT-76)		0	8
	Total	1	8

Thus the total officer and enlisted strength of each size unit is:

، ، ۵. ،

Regiment	2049
Infantry Battalion	463
Tank Battalion	146
Infantry Company	112
Tank Company	36

These numbers are derived assuming that the individual units are Category I strength (see Appendix A for definition of strength categories). Thus, if the Naval Infantry regiment is only maintained in Category II or II strength, then these numbers would be reduced. At full unit strength, these figures probably represent a minimum strength level for the regiment since information on different rear service units is not available. Also the tank battalion would increase in size if it were using the T-54/55 tank requiring a 4-man crew.

Overall Strength

The basic organizational structure and numerical strength have now been determined. The final two questions which need to be answered are:

What is the size of the Naval Infantry units in each of the fleet areas?

What is the total strength of the Soviet Naval Infantry?

To answer the first question, the data in Appendices H. I. and J must again be examined. From this analysis, the following is considered to be the basic minimum order of

battle for the Naval Infantry.

3.,

Northern area 1 Regiment 2059 men

Baltic area 2 Regiments 4118 men

(1 Regiment assigned to the
Southern Naval Group and 1
Regiment to the Northern
Naval Group)

Black Sea area 1 Regiment 2059 men
Pacific area 1 Regiment 2059 men

This represents a minimum order of battle since it does not include the possibility that Marines are stationed with either the Danube or Amur Flotillas. If these units exist and are not Marine units already assigned to the Black Sea and Pacific Fleets, then the additional strengths would be:

Danube Flotilla 2 Battalions 978 men (Each battalion would be reinforced with 1 tank company)

Amur Flotilla 1 Regiment 2059 men

By adding these quantities, the overall strength is obtained.

Naval Infantry in 4 fleet areas 10264
Naval Infantry in 4 fleet areas 13301
plus 2 flotillas

These figures can now be compared with similar strengths set forth by other authors. These figures are found at the end of Appendix J. These overall strength figures of 10264 and 13301 are only a minimum level (at Category I strength) since figures for certain types of operational units were not included. Finally, these figures also do

not take into account permanent training and base personnel and those Marines included in the higher level staff of the Chief Directorate of the Naval Infantry. These figures do provide a firm basis from which the potential of the Soviet Naval Infantry can be better evaluated.

Warsaw Pact countries would appear to have the following amphibious capability. Poland has the most organized and well equipped amphibious trained units - an amphibious assault division (under the control of the army) whose strength lies between 4000 and 7000 men and a 1000 man Marine force belonging to the navy. East Germany has at least one regimental size unit trained specifically for amphibious operations. Rumania and Bulgaria have only small numbers of naval infantry who are primarily assigned to the Danube Squadron and for coastal defense.

CONCLUSIONS and RECOMMENDATIONS

Conclusions

The primary conclusion of this research project must carry a large IF. IF the Soviet Marines are thoroughly trained in every area as suggested by various Soviet sources, then they certainly are extremely skilled and highly trained soldiers of the sea. This type of extensive and specialized training would only be found in our own Force Reconnaissance units of the USMC and the army's Special Forces. Thus, the Soviet Marines would certainly earn their elite status.

Even though the Soviet Naval Infantry may be a highly trained organization, it is still a very small organization. Due to this fact alone, it would appear that the Soviet Marines are trained for independent small unit operations or for use as an initial spearhead for much larger operations.

The Soviet Naval Infantry has very good equipment and weapons, although it would be considered lightly armed with the PT-76 tank and MRLs as its primary means of large caliber support. Of course, light versus heavy armament must be weighed against possible missions such as initial beachhead assaults and small unit operations.

Amphibious shipping appears only adequate for small unit operations with emphasis on coastal deployment.

The Soviet Navy does not have the amphibious lift capatility (both in size and durability) to conduct extended (long distance from the cost to of the U.SR) and extensive amphibious assaults. The Naval Infantry does appear to make full use of its limited amphibious lift capability during the many training exercises conducted each year, both alone and in conjunction with other Warsaw Pact countries.

Finally, the Soviet Naval Infantry is apparently well organised to fight small unit operations with the regiments providing combat and combat service support (such as MRL, tanks, CBR, engineers, anti-aircraft defense, supply, and maintenance support) to each of its battalions. Although for sustained operations, it would appear that the Naval Infantry must rely heavily upon logistical support from the Soviet Navy.

This research paper has attempted to present a detailed analysis of the Soviet Naval Infantry from information available in unclassified sources. As a result of this comprehensive research, this author also found many questions which could not be answered within the limits of this project. Many of these questions are presented as a part of the conclusions demonstrating that although this is a comprehensive study, it is not complete until these questions are answered. Once these

were are determined the reader or researcher will then to see a notic foundation and understanding of the Soviet

Reval Infantry upon which future research may be based.

These questions, by chapter, include:

Chapter 1

- What were the specific reasons behind the Soviet government's decision to re-establish its Naval Infantry?

Chapter 2

- To what extent does the Soviet Navy influence the processing of Soviet youth into the Naval Infantry?
- Where are the exact locations of the Naval Infantry bases? Does each base have the same facilities?
- What is the specific daily schedule of a Soviet Marine?
- Do significant morale problems exist in the Naval Infantry?
- Is there a general rotation of career personnel (officers and enlisted) from one fleet area to another during an individual's career?
- To what extent do young officers display initiative and aggressiveness?

Chapter 3

- Are other military colleges providing specific instruction for future Marine officers?
- What is the exact status of the Viborg training base?
- To what extent do officers receive their initial training at the Viborg base?

Chapter 4

- What specific types of vehicles are used by the Naval Infantry?
- Has the B-10 recolless anti-tank gun been replaced by the SPC-9 anti-tank gun?
- Is the AT-3 Sagger being used by the Soviet Marines?
- Does the Naval Infantry have the SA-7 and SA-9 in its anti-aircraft missile inventory?
- Has the 82mm mortar been replaced by the 120mm mortar?
- Do the Soviet Marines use any other type of standard artillery other than the MRL?
- Is the T-62 tank replacing the T-54/55?
- Which tracked APC are the Soviet Marines using?

- Will all APCs be replaced by the BMP?

Chapter 5

- ~ What are the specific characteristics of the Ropucha class landing ship?
- Do the Soviets plan to use the Kiev and Moskva class ships in amphibious operations?

Chapter &

- What were the dates, locations, and participating units of the amphibious training exercises for which little information if known?
- From the various training exercises, what possible missions can be determined?

Chapter ?

- Is there a commandant of the Soviet Naval Infantry: if so, who is he, what is his role, and how much influence does he exert?

- What is the present officer structure of the Soviet Naval Infantry?

Chapter 8

- What are the exact types and sizes of the Naval Infantry units in the various fleet areas?
- What is the exact composition of a Naval Infantry regiment, particularly with respect to combat support and service support units, such as Engineers, CBR, Supply, and Maintenance?
- Do the flotillas have their own Marine force or do these forces come from the various fleet Naval Infantry units?
- What is the exact status of personnel such as UDT, medical, and food service?
- How many personnel are included in the category of training and base personnel and high level staff personnel?

Recommendations

In concluding this project, this author presents five recommendations for additional research based upon the preceding work.

- 1. Continue to research Soviet sources in order to answer the unanswered questions posed in the conclusions, thus providing a fuller understanding of the Soviet Naval Infantry.
- 2. Research and evaluate additional Soviet/
 Western fources which were not available for this research
 project, again to gain a fuller understanding of the
 Naval Infantry.

- 3. Utilize this comprehensive analysis as a basic foundation for an in-depth study of the amphibious tactical doctrine of the Soviet Naval Infantry.
- 4. Utilize this project as the point of reference for an in-depth study of the missions and future potential of the Soviet Naval Infantry.
- 5. Finally, to gain a thorough understanding of the amphibious strategy of the Warsaw Pact, a comprehensive examination should be undertaken of the amphibious capability of the other Warsaw Pact countries, particularly the Polish and East German amphibious forces.

APPENDIX A

Definitions

The following definitions of Soviet military terminology and combat readiness categories are provided for comparison and better understanding of the Soviet Naval Infantry.

Primarily, three Soviet sources are used for the definitions of the following military terminology. These sources are:

- 1) Russian-English Dictionary (Smirnitskii, 1971).
- 2) Large Soviet Encyclopedia (Prokhorov, Vol. 4, 1971; Vol. 16, 1974; Vol. 20, 1975; and Vol. 24, 1976).
- 3) Dictionary of Basic Military Terms (U.S. Air Force, 1965).

In addition, several Western sources have been utilized for specific definitions.

General terms:

Morskaia Pekhota

- #1 marines, marine light infantry (literally translated: naval infantry), p. 296.
- #2 arm of the naval forces, intended and specially trained for the conduct of combat operations in naval landings; in an organized respect consists of units and subunits ..., Vol. 16, p. 586.
- From Soviet Regulations, Marines: Marines are like motorized riflemen. They belong, however, to the naval forces and have not only the weapons of the motorized riflemen but special weapons and skills, such as

rockets and amphibious vehicles, and they are trained for amphibious warfare. Among their tasks are carrying out amphibious landings ... }!!

Also, J.P. Meehan provides an analysis of this term. 312

Morskou Desant

- #1 only provides definition for desant: landing, landing party (literally translated: naval landing), p. 149.
- #2 troops intended for a debarkation from the sea or a landing on the sea coast of the enemy. Varies according to scale and goals ..., Vol. 16, p. 595.
- #3 only provides definition for <u>desant</u>: (landing force) troops intended for landing, or which have already landed, on enemy-occupied territory, for the purpose of conducting operations ..., p. 67.
- From Soviet Regulations, Amphibious Landings: The amphibious landing is a military operation of the navy that has tactical or strategic significance. It is conducted in close cooperation with ground and air forces according to a common plan. The primary goal of an amphibious landing is to capture and occupy enemy territory from the sea and air ...
- Also C.L. Donnelly provides a description of the word desant. 311;

Types of training:

Zaniatie

#1 - studies, lessons, p. 194.

Uchenie

- #1 studies, learning, (military) exercise, p. 625.
- #3 (military training exercise) One of the

basic methods of combat training for troops (naval or air forces) and the staffs of units, formations, and major field forces or strategic formations, of the various Services, as well as for rear service elements, and special troops..., p. 227.

Types of units (general and specific):

Soedinenie

- #1 formation, large unit, p. 593.
- #2 general name of tactical soedinenii: brigade, division, corps, and squadron (Navy) ..., Vol. 24, p. 71.
- #3 Formation. The highest level of military organization: Corps, Division, or Brigade level equivalent. It may be formed from a single branch of various branches and services, including naval squadrons. p. v.

Chast'

- #1 (military) unit, p. 698.
- #3 Unit. Any administrative, line, or housekeeping unit of regimental size or smaller that is administratively self-contained and has its own designation, number, and banner. It is the basic tactical (combat) and independent organizational unit up to, and including the regiment. Each consists of subunits. D.V.

<u>Podrazdelenia</u>

- #1 (military) sub-unit, small unit, element, p. 440.
- #2 military unit, having regular (or permanent) organization and a uniform structure and being a part of a larger podrazdelenie or chast; examples; squad, platoon, company, battalion. Vol. 20, p. 133.
- #3 Subunit. It has a permenent organization and is usually homogenous in make-up. It does not

have its own (subunit) number. Battalions, batteries, companies, platoons, and squadrons may all be subunits. p.v.

Brigada

- #1 (military) brigade, p. 57.
- #2 (military) in land forces soedinenie of several battalions or regiments and military units of special troops. It can be naval infantry ..., Vol. 4, p. 29.
- #3 (brigade) A formation of troops from different service branches and special troops from the various services, consisting of several battalions (artillery battalions) and special subunits ..., p.29.

Polk

- #1 regiment, p. 449.
- #2 military unit of various branches of service and special troops of all types of armed forces: organizationally an independent combat, administrative, economic unit ..., is a general military tactical unit. In each polk, there are a headquarters; several battalions; combat, material, and technical support military units. Excluding separate polk, it is a part of the structure of a soedinenie ..., Vol. 20, p. 232.

Deployed units of the Soviet armed forces are marned at various levels of combat readiness, which the Soviets have labeled Category I, II, and III. The definitions of these categories are:

- Category I Three-fourths to full strength of the complement of troops and complete equipment.
- Category II One-half to three-fourths strength with complete fighting vehicles, not

necessarily of the latest type, may also ack some mobility equipment, such as trucks.

Category III - One-third to one-half strength with complete fighting vehicles. although they may be obsolescent models, also may lack some mobility equipment, such as trucks.315

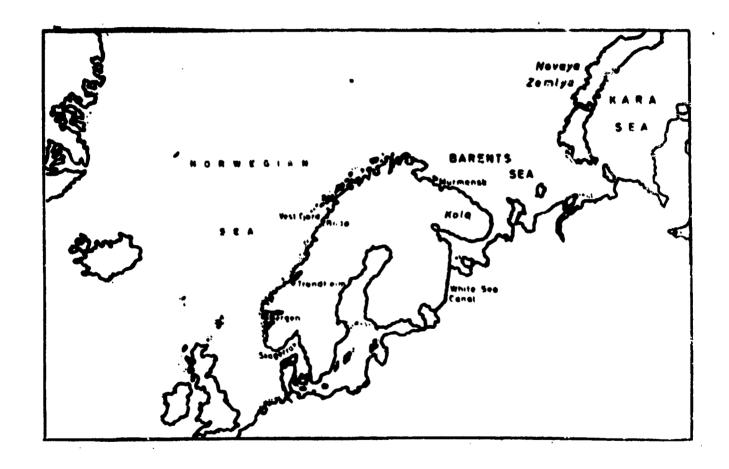
APPENDIX B

Marps 316

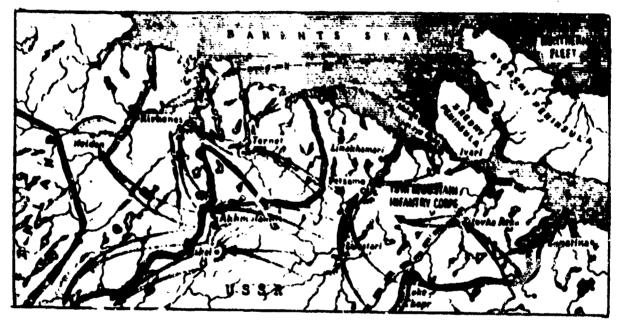
Appendices:

- B.1 Norwegian and Barents Sea Area
- B.2 Pechenga (Petsamo) and Linakhamari
- B.3 Baltic Bases
- B.4 East German Bases
- B.5 Polish Bases
- B.6 Black Sea Bases
- B.7 Pacific Bases

APPENDIX B.1 Norwegian and Barents Sea Area

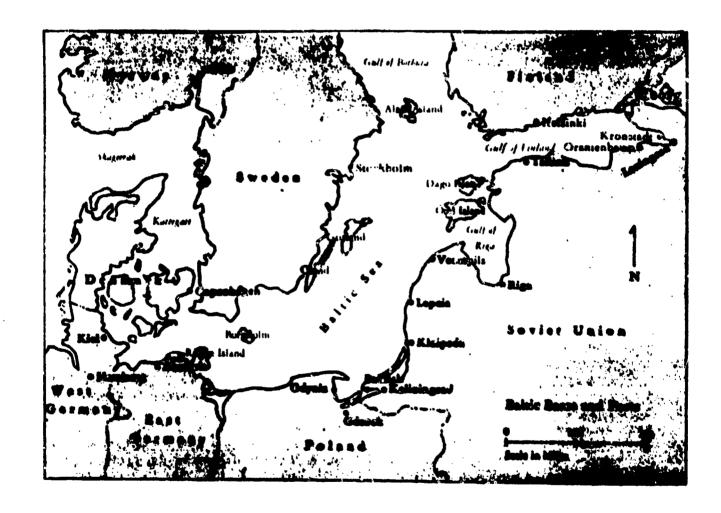


APPENDIX B.2 Pechenga and Linaklamari

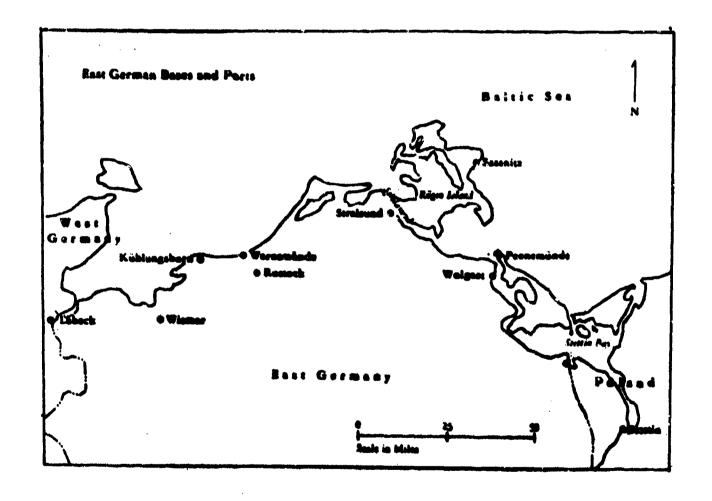


Potsamo is row the location of the Fechenga base.

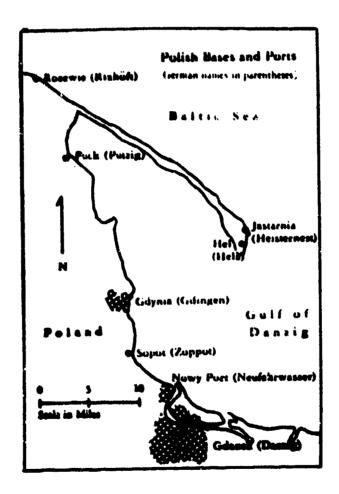
Baitle Bases



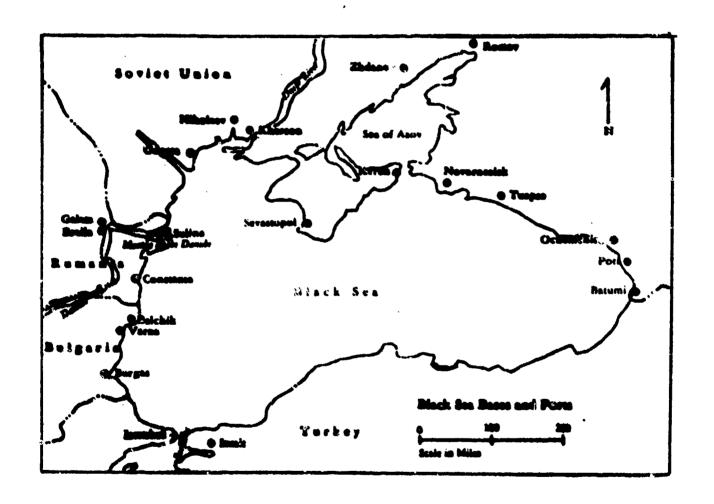
APPENDIX B.4
East German Bases



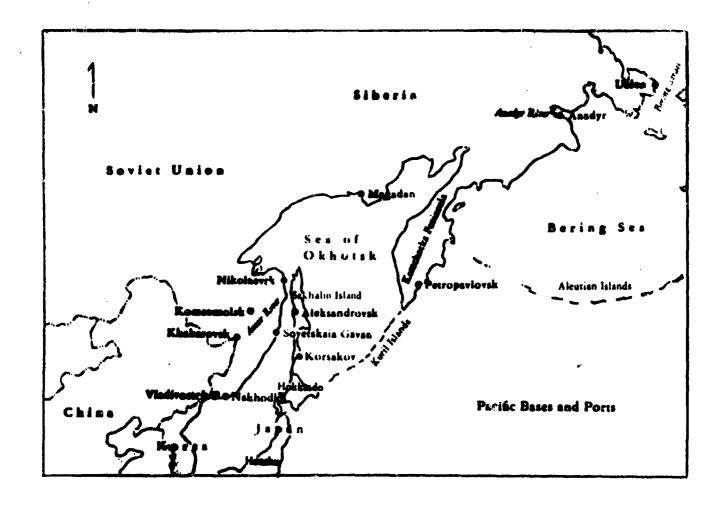
Polish Bases



APPENDIX B.6
Black Sea bases



APPENDIX B.7
Pacific Bases



APPENDIX C

Equipment Characteristics

Type	of'	Equ.	<u>ipment</u>	

General Characteristica

Individual Equipment:

ShM gas mask

Helmet-type mask with facepiece, hose, and

canister.

ShMS gas mask

Special protective mask

OP-1 protective suit

Made of impermeable

rubberized fabric includes

gloves.

Unit Equipment:

R-113 and R-123 radios

Mounted in APCs, large

frequency band.

R-107 and R-126 radios

Man-packed with limited range and frequency band.

Vehicles:

URAL-375 truck

6x6. cruising range=600km, road speed = 75kmh.

GAZ-63 truck

4x4, cruising range=350km, road speed = 65 kmh.

M-72 motorcycle

Seats 2 personnel, cruising range = 300km, maximum

speed = 85 kmh.

Amphibious Vehicles:

K-61

2-man crew, carries 60 passengers; payload on land = 3000kg., on water=5000kg; cruising range=260km; land speed = 36kmh, water speed= 10kmh.

PTS-M

2-man crew, carries 70 passengers; payload on land=5000kg., on water=10000kg; cruising range=300 km; land speed=40kmh, water speed = 15kmh.

GAZ-46(MAV)

Carries 5 personnel; payload on land=500kg., on water=500kg.; cruising range =500km; land speed= 90kmh, water speed=9kmh.

BAV .

Carries 25 personnel; payload on land =2500kg, on water=2500kg; cruising range=480km; land speed= 60kmh, water speed=10kmh.

GAZ-47 (GT-S)

2-man crew; carries 9
passengers; payload on
land=1000kg; cruising
range= 725km; land speed=
36kmh, water speed=4kmh.

APPENDIX D

Weapon Characteristics

Type of Weapon	General Characteristics
Small Arms:	
PM Makarov pistol	9mm; 8 round magazine; effective range =50m.
AKM Kalashnikov	7.62 mm; 30 round magazine; effective range=400m; rate of fire=600 rds/min.
RPK Kalashnikov light machine gun with bipod	7.62 mm; 75 round drum magazine and 40 round clip magazine; effective range=800m; rate of fire=650 rds/min.
PK(bipod) and PKS(tripod) Kalashnikov general purpose machine gun	7.62 mm; 100, 200, 250 round box magazines; effective range=1000m; rate of fire=650 rds/min.
Dragunov (SVD) sniper rifle	7.62 mm, 10 round magazine; effective range=800m; semi-automatic.
RGD-5 hand grenade	Anti-personnel; burst radius = 25m.
RKG-3M hand grenade	Anti-tank; HEAT warhead with drogue chute.
Anti-tank Weapons:	
RPG-7	effective range 300m; armor penetration=330mm; rate of fire=4-6rds/min.
B-10 recoilless anti-tank gun	82 mm; effective range= 400m; armor penetration= 240mm; rate of fire=6rds/min

SPG-9 anti-tank gun

73mm; effective range= 1000m; armor penetration= 400m; tripod mounted.

AT-3 Saggar missile

Man-portable kit consists of 2 missiles, also mounted on BTR-40P, BRDM, and BMP; effective ranges=500-3000m; armor penetration=500mm.

AT-2 Swatter missile

Mounted on BTR-40P; e Sective ranges=600-2500m; armor penetration=500mm.

AT-1 Snapper missile

Mounted on BTR-40P; effective range=500-2300m; armor penetration=350mm.

Anti-aircraft Weapons:

ZPU-4

14.5mm; 4-barrel mount; effective range=1.4km; rate of fire=4x600rds/min; towed by a ZIL-151 truck.

ZSU-23-4

23mm; 4 barrel mount; effective range=2.5km; rate of fire=4x1000rds/min; radar fire control; self-propelled; 4-man crew; cruising range=250km; road speed=45kmh.

SA-7 (Grail) missile

Man-portable, hand held; solid fuel, infared guidance system; slant range= 3.5km; speed=1.5mach.

SA-9 (Gaskin)missile

Mounted on BRDM; infared guidance system; range=4km; speed=2 mach.

Artillery:

BM-21 multi-rocket launcher

122mm; 40 tubes; effective range=20.5km; reload time= 10 minutes; mounted on URAL-375 truck.

BM-14 multi-rocket tauncher

140mm; 17 tubes; effective range=9.8km; reload time= 3-4 minutes; mounted on GAZ-63 truck.

BM-14 multi-rocket launcher

140mm; 16 tubes; effective range=9.8km; reload time= 3-4 minutes; mounted on ZIL-151 truck.

122 howitzer

122mm; effective range= 12km; rate of fire=5-6rds/ min; split trail carriage.

Tanks

PT-76 amphibious tank

76.2 mm main gun and 7.62 mm turret mounted machine gun; 3-man crew; carries 40 rounds; rate of fire= 6-8 rds/min; cruising range= 260km, 450km with extra fuel; land speed=45kmh, water speed= 10kmh.

T-54/T-55 medium tank

100 mm main gun with 7.62 mm turret mounted machine gun (T-54 sometimes has 12 7mm anti-aircraft machine gun); 4-man crew; carries 34-43 rounds; rate of fire=3-5rds/min; cruising range=500km, 600km with extra fuel; land speed=50kmh; snorkel depth=5.5m.

T-62 medium tank

115mm main gun with either a 7.62mm machine gun or a 12.7mm anti-aircraft machine gun mounted on the turret; 4-man crew; carries 40 rounds; rate of fire=4-6rds/min; cruising range=500km, 600km with extra fuel; land speed=50kmh; snorkel depth=5.5m

PT-85 medium tank

85mm main gun with two machine guns; 5-man crew; carries 56 rounds; cruising range=300km; land speed=53kmh; used primarily as training vehicle.

Armoured Personnel Carriers:

BTR-40

2-man crew, carries 8 passengers; cruising range=285km; land speed=80kmh; carries either 7.62mm machine gun or a 14.5mm ZPU-2 anti-aircraft machine gun, also used to carry various anti-tank missiles; it is not amphibious.

BTR-152

2-man crew, carries 17 passengers; cruising range= 650km; land speed=65kmh; carries 7.62mm machine gun or 14.5mm ZPU-2 anti-aircraft machine gun; it is not amphibious.

BRDM-2 amphibious scout car

4-man crew; carries 7.62mm machine gun and 14.5mm machine gun, may also be used to carry anti-tank missiles; cruising range=750km; land speed=100kmh, water speed=10kmh.

BTR-60P/FA amphibious carrier

2-man crew, carries 16 passengers; rain armament is 7.62mm machine gun; cruising range=500km; land speed=80kmh, water speed=10kmh; open/closed armor top.

BTR-60PB amphibious carrier

2-man crew, carries 14 passengers; closed armour top with turret; main armament is 14.5mm machine gun and 7.62mm machine gun; cruising range=500km; land speed=80kmh water speed=10kmh.

BTR-50PK tracked amphibious carrier

2-man crew, carries 20 passengers; closed armour top; main armament is 7.62mm machine gun; cruising range= 260km; land speed=45kmh, water speed=11kmh.

BMP-76PB tracked amphibious carrier

3-man crew, carries 8 passengers; main armament is a 73mm smoothbore gun, a 7.62mm machine gun, and a mount for the AT-3 Sagger; cruising range=300km, land speed=60kmh, water speed=8kmh.

APEENDIX E

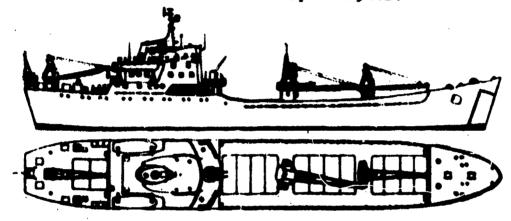
Characteristics of Amphibious Ships

Type of Amphibious Ship

Alligator (LST)

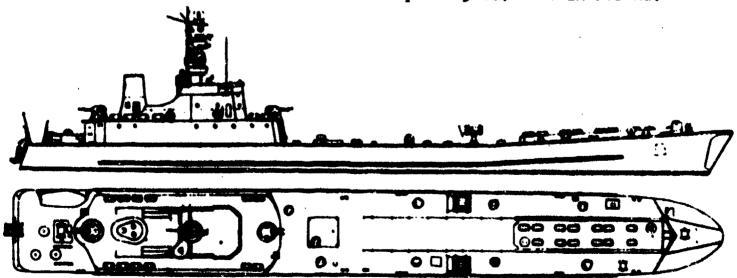
General Characteristics

Carrying capacity=1700 tons. (500 men plus 20-25 vehicles); has how and stern ramps; speed=15kts.



Polnochnyi (LCT)

Carrying capacity=350 tons. (100 men plus 8-10 tanks); has bow door and ramp; speed=15kts; made in Poland.



Bathar (LOU)

Carrying capacity=200 tons. (200 men or 4 armoured cars); has bow door and ramp; speed=16kts.



MP-4 (LCU)

Full load capacity=800tons (6-8 tanks); bow door and ramp; speed=12kts.



MP-6 (LCU)

Carrying capacity=500 tons (6-10 tanks); bow door and ramp; speed=12kts.



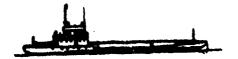
MP-8 (LCU)

Carrying capacity=400 tons (6-8 tanks or 5 armoured cars or 10 amphibious vehicles or 400 tons of cargo); bow door and ramp; speed=15kts.



MP-10 (LCU)

Carrying capacity= 150 tons (4 tanks); bow doors; speed= 11 kts.



Vydra (LCU)

Carrying capacity=250 tons (2 tanks); speed=15kts.

SMB-1

Carrying capacity=200 tons (4 tanks); speed=10kts.



Ropucho (LCT)

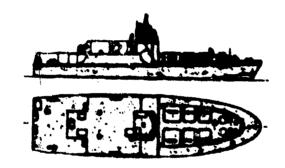
7 (LCN)

Kuter Desantowy (Polish)

Reported to have similar characteristic, as the Alligator.

Full load capacity= 80 tons (1 vehicle): speed=24kts.

Carrying capacity is 15 to 25 men with equipment; has enclosed personnel space, but no bow nor stern ramp; speed=12 to 14 kts. 317



Robbe (LOT-GDR)

Labo (LCT-GDR)

MFP (LCM-Bulgarian)

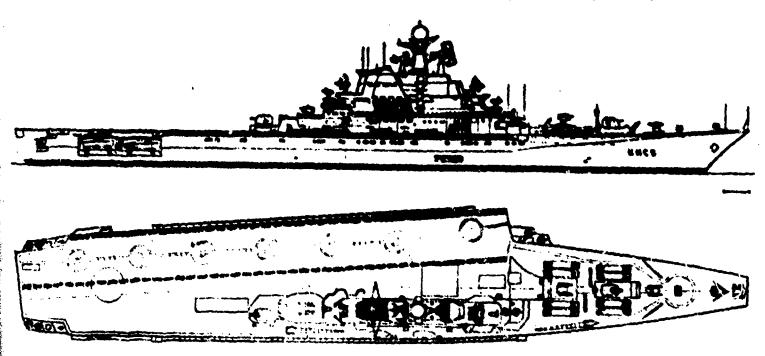
Carrying capacity=200 tons, (8-10 tanks); speed=12kts.

Carrying capacity=50 tons. (2 tanks); speed=10kts.

Small landing craft - details unknown.

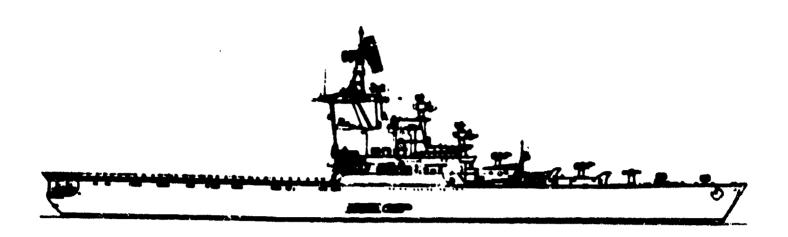
Kiev (alremant earnier)

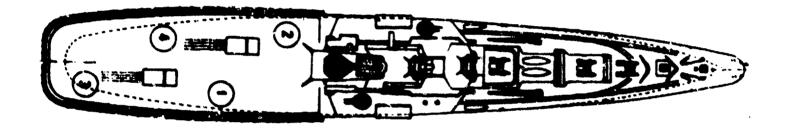
"Kuril" class included Kirv, Minsk, and at least one more ship presently under contaction; aircraft complement includes 25 YAK-36, 25 Ka-25 Hormones or modified Hinda; speed=30kts; estimated to have enpablity to earry troops.



Moskva (helicopter cruiser)

"Mosk va" class includes the Mosk va and the Leningrad; aircraft complement is 18 Ka-25 Hormones; speed=30kts; estimated to be able to carry a battalion of Naval Infantry, 119





Hydrofoils

Sormovich ACV

MC-O1 ACV

GUS ACV

AIST ACV

Small landing craft; carrying capacity is 2-3 tanks.

Carrying capacity=50 passengers; speed=96kmh over ice320

Small landing craft

Weight=27 tons; light cargo, 50 passengers, no armament; carrying capacity=9 tons; speed=58kmh; range=380km

Weight=180 tons; large cargo and troop capacity, can carry T-62 tanks; has drive on/off ramps; light armament; speed=60kmh

APPENDIX F

Military Aircraft

Helicopters	
Ka-25 (Hormone)	Most common helicopter found on Kiev and Mosk va carrying capacity in utility role=2500kg or 12 passengers; speed=200kmh; range=650km.
Mi-l (Hare)	Carrying capacity=4 pas- sengers: speed=170kmh; range=500km.
Mi-2 (Hoplite)	Carrying capacity=700kg or 8 passengers; speed= 210kmh; range= 580km.
Mi-4 (Hound)	Carrying capacity= 1100kg or 14 passengers; speed= 185kmh; range=200 km.
Mi-6 (Hook)	Carrying capacity= 13 tons or 65 passengers; speed= 300kmh; range=620 km.
Mi-8 (Hip)	Carrying capacity= 4 tons or 28 passengers; speed= 250kmh; range= 425km.
Mi-10 (Harke)	Carrying capacity= 15 tons (all cargo or combination of cargo and up to 28 passengers); speed= 200kmh; range= 250 km.
Mi-12 (Hind A)	Armed helicopter; can carry 8 passengers or 4 tons; speed= 275 kmh; range = unknown.
YAK-38 (Forger)	Improved version of YAK-36 321

YAK-36. (Freehand)

V/Stol aircraft used on the Kiev; single seat, subsonic recon/attack aircraft. speed= 1000kmh; range= 580kml²

Ekranoplan Craft (WIG)

Experimental wing-in-groundeffect aircraft; carrying capacity= 900 passengers; speed= 300kmh.

APPENDIX G

Deployment of Amphibious Ships

Appendices

- G.1 Deployment in the Mediterranean Sea
- G.2 Deployment in the Indian Ocean
- G.3 Deployment in the Atlantic Ocean

APPENDIX G.1

Deployment in the Mediterranean Sea

<u>Da te</u>	Type of ship	Remarks
June, 1967	Alligator/ Polnochnyi	Since 1967, at least 3 landing ships have been stationed in the Mediterranean. These ships are from the Black Sea Fleet. On occasion, reported to be carrying a battalion of Marines with their PT-76 tanks.323
Summer, 1968	3 landing ships and seves. A landing craft	
August, 1969	8 landing ships ³²⁴	Naval Infantry occa- sionally on board, 325
March. 1970	12 landing ships including 326 Alligators	
September/ October, 1970	6 landing ships	3(LST, LSM, LCM) at Port Said: 3(LST, LSM) between Rhodes and Cyprus 327
1971	6 or more landing ships, including LST	Enough shipping to lift a battalion of Marines 328
1972	l Alligator, l Polnochnyi and l landing craft	Alligator has appeared with Marines of board 329
1974	Landing ships	at least 2330
1975	Polnochnyi 331	

APPENDIX G.2

Deployment in the Indian Ocean

Da te Type of Ship Remarks

1968 Since 1968, 1 Alligator in Indian Ocean squadron, Alligator

may be used as "dry stores" ship; ship comes from Pacific Fleet?32

September, 1969-February, 1970 Alligator(#424)

April, 1970-July, 1970

Alligator

August, 1970-Alligator Pebruary, 1971

Alligator(#362) 333 February, 1971-July, 1971

Marines on board ship. 334 November, 1972 Alligator

Alligator 335 1974 Alligator 336 1975

APPENDIX G.3 Deployment in the Atlantic Ocean

Date	Type of Ship	Remarks
September, 1970	Alligator	To Cuba from Northern Fleet; carried 2 barges and constuction material for a naval base.
1972	Alligator	Guinea Patrol, off west coast of Africa near Conakry. One landing ship has re- mained on this patrol since 1972.
1974	l landing ship	Deployed in Atlantic. 339
1976	Alligator	West African coast; includes 100-150 Marines; ship is from Guinea Patrol. 340
1976	Landing craft	Several maintained on Spitzbergen Island. 341

APPENDIX H

Soviet Marine Officers

(Alphabetical Listing by Rank)

Appendices:

H.1 Major General

H.2 Colonels

H.3 Lieutenant Colonels

H.4 Majors

H.5 Captains

H.6 Senior Lieutenants

H.7 Lieutenants

H.8 Junior Lieutenants and Praporshchik

H.9 Officers (Rank not identified)

The following abbreviations are used in this appendix:

U = Unit

N = Northern Fleet

SU = Subunit

B = Baltic Fleet

Regt = Regiment

Bl = Black Sea Fleet

Bn = Battalion

P = Pacific Fleet

Co = Company

Plt = Platoon

Officers are commanding officers of their respective unit unless otherwise stated.

Units and Locations in parentheses are estimates.

Officers with an asteriisk * are not included in formulating approximate command structure in Appendix I.

See Appendix A for definitions of unit and subunit.

APPENDIX H.1

Major General

Name	<u>Unit</u>	Location	Date
Mel'nikov, P.E. (artillery)	author author author author author CG, Shore art	illery	1977* 1975* 1975* 1972* 1971* 1970* 1969*

Colonels

Name	Unit	Location	Date
Beregov, P.Ia.	author/U		1975* 1974
Borsenko, S.A.	U	3	1970
Kharitonov, I.Ia.	U	•	1970
Korotkov, A.Ia.	author U	В	1971° 1970
Laletin, A.A. (LTC)	Regt author	3	1970 1965*
Loshchits, M.	author	B1	1971
Nechaev, N.V.	author		1975*
Noga, L.A.	author		1975 * 1972 *
Pakhomov, A.F.	U	N	1970
Roitenburd, L.N.	Cdr, Naval 1 author	infantry	1970 1 96 9*
Sergeenko, B.I.	author author		1975 * 1971 *
Shapronov, P.T.	U	B	1970
Sotnikov	U	N	1770

APPENDIX H.3
Lieutneant Colonels

Nume	Unit	Location	Date
Arshanukhin, G.	30	B	1968
Briukhanov, B.	author		1962*
Chernogorov, N.	author author	(P)	1971 * 1970 *
Gagloev, N.	author Tank SU		1977* 1975
(Maj)	SU		1972 1971
Gaidukov, V.	SU	3	1967
Gorianov, A.	author		1975
Gorokhov, V.	SU author /SU		1973 1971
Karimov, Ia.K.	SU		1969
Korolev, A.	SU	N	1970
Maslov, S.	SU	В	1967
Nikolaienko, N.I.	Bn Bn	P P	1971 1970
Nikulin, K.	Bn		1977
Onopriichuk	SU		1964
Pavlov, I.	author		1973*
Pushkarev, K. (engr)	author		1976*
Soroka, A.	author		1970*
Sysoliatin, I.I. (Maj)	Regt SU SU SU	B1 (P)	1971 1967 1965 1964

	Majors		
Name	Unit	Location	Date
Baranov, N.	SU SU	В	1968 1965
(Cpt)	Tank SU		1964
Boikov, G.	Bn		1971
Boikov, T.	B n		1970
Boikov, V.	SU	×	1970
Daskevich, S.	Assistant f Political a		1971*
Domnenko, A.	su su	(B)	1977 1973
Essholenko, Iu.	Bn	X	1970
Pantrov, V.	SU	N ·	1969
Iakovlev. V.A. (SmLt)	Bn Co		1974 1969
Ovcharuk, V.	SU	B1	1971
Panin, V.	3 ប	B1 *	1971
Sergeev, V.	su		1968
Shcheglov, E.	author		1976•
Shestakov, N.	author	B	1965*
Shoigan, A.	Assistant : Political :		1968*
Smirnov, A.	SU	£	1968
Sorokin, V.	Political v		1968 * 1964 *
Toishev, V.	Assistant : Political :		1968*

Taymbal, A.	author		1972*
Zharko, P.	SU Chief of Staff	B 1	1971*
Zhidkov, V. (Cpt) (Cpt)	SU SU SU	B1 B1	1971 1971 1970

Captains

Name	Unit	Location	Date
Abramov, I.	Co	P	1976
Aranobskii, I.	Medical serv	•	1976*
Belokon', A.	Tank SU		1970
Bezuglyi, V.	Recon SU		1964
Boitko, P.	Political wk	r. (B)	1968*
Dvornikov, V.	Tank SU	B	1967
Gladkikh	Co		1971
Ivanov. A.	SU	B	1968
Ivanov, V.	SU	(P)	1975
Kologenko, A.	Tank SU		1964
Kovalevskii	Political wk	r. Bl	1970*
Kudlo, R.	Tank Co	N	1970
Mel'nikov, A.	SU	B 1	1967
Morev, V.V.	SU		1970
Nabakhtian	SU		1963
Prokopovich. E.	Anti-tank SU	P	1965
Robakidse, G.	SU Mrl Su	K	1971 1970
Rosliakov, Iu. (SrLt) (Lt)	BN Chief of BN Chief of SU SU		1973° 1971° 1968 1968
Sergeev, G.	SU		1967

Shumiglovskii,	Tank Co	В	1969
Solomenik, M.	su	B	1972
Steblovskii	SU SU	B B	1967 1965
Stolevich, E.	su		1964
Tkachev, G.	MRL SU	B1	1971
Volkov. A. (SrLt)	SU MRL SU	(B) N	1977 1975
Yevsyukov, V.	SU	P	1976
Zubar'. V.G.	Tank SU		1965

Senior Lieutenants

Name	<u>Unit</u>	Location	<u>Date</u>
Abramov, A.	Food serv.	SU	1976*
Afanas'ev, V.	Co	N	1969
Amirkhanian, V.S.	SU Co	(Bl)	1972 1971
(Lt)	SU		1969 1968
Bashlovin, A.	SU	Bl	1971
Bortnikov, V.	Tank Plt		1975
Deliia, V.	Tank Plt		1975
Estaf'ev, A.	Co Su		1974 1973
Golubev, V.	Co	N	1970
nterenko, V.	ຮບ	B1	1970
Iskamov, R.	Recon SU	Bl	1970
Karpenko, V.	Tank Co		1975
Kasperovich, G.	Tank Co	N	1970
Kislitsin, B.	su		1970
Kononenko, N.F.	នប		1970
Korneev, V. (Lt)	Co Co		1973 1972
Kornienko, V.	Tank SU SU	Bl Bl	1971 1970
Kozlov, N.	APC SU Co	B B	1971 1969
Leksuitkin, A.	Tank SU		1972

Loktionov, N. (Lt)	Tank Co Tank Plt		1973
Makarov, V.	Engr. SU	N	1972
Makukha, A.	Plt	N	1970 1970
Malov, V.D.	SU SU	(P)	1965 1964
Manoilenko	Tank Plt		1962
Mukhametzianov, N.	Plt		1973
Nilov, V. (Lt)	Tank Plt Plt		1977 1974
Oblogu, L. (Lt)	SU Flt		1976 1974
Orlov, V.	Tank SU		1972
Ostrik, V.	Tank Plt		1972
Repetenko, N.	Tank SU Tank SU	P P	1971 1970
Rodygin, V.	Co		1973
Samoilov, E. (Lt) (Lt)	Co Plt Tank Plt		1973 1972 1971
Semko, S.M.	su		
Shereged, V.I.	su		1971
Shmerkin, Y.	Tank SU	В	1970
Smetankin, V.	Maintenance SU	J	1971 1976*
Smirnov, Iu.	Plt Recon SU	В	1965 1964
Strunin, Iu.	Tank Co Tank Co	В	1970 1969
Tashbaev, O.	Artillery Battery	N	1970

Timakov, V.	Anti-aircraf Battery	1970	
Trofimenko, V.	Tank SU Tank SU	B B	1972 1970
Tskhai, L.	SU Tank Co	B1	1973 1970
Tskhovrebov, V. (Lt)	Co Mortar SU Mortar SU	B1 B1	1971 1967 1964
Ushakov, V.	SU	(B)	1968
Zarva, S. (Lt)	Ço Pli		1977 1972

Lieutenants

Name	<u>Unit</u>	Location	Date
Balatskii, V.	Tank Plt		1975
Bogomaz, I.	Plt		1972
Danilov, L.	Plt	(B)	1977
Durnovtsev, P.	Engr. SU		1970
Efimov, V.	Plt	N	1969
Pegotychev, V.	Plt		1973
Pesenko, V.	Tank SU		1965
Gaidee, V.	udt su	B1	1971
Galanin, S.	Plt		1972
Glebov, A.	Tank SU	В	1970
Grachev, V.	Engr. SU	B1	1971
Gurak, P.	UDT SU	В	1969
Kabarzhitskii, V.	SU		1964
Kapitaniuk, B.	Tank SU	В	1970
Khazov, V.	នប	(B)	1968
Kirianov, I.	Plt	P .	1.976
Kovtunenko, N.	Su	(B)	1970
Kuznetsov, P.	author		1970*
Leonov, A.	Rear service	SÜ	1976*
Mikholap, K.	Plt	B	1977
Mikuliak, I.	Political wkr	. B1	1967*
Milochkin	Plt		1963

Oleinik, A.	Snan Cu	D.3	1051
Oldinik, K.	Engr. SU	Bl	1971
Pestov, B.	Tank SU	B	1972
Pestov, Iu.	SU	P	1965
Popov, M.	Plt Plt	F P	1971 1970
Proshin, Iu.	APC SU	P	1965
Proshkin, A.	Mortar SU	(B)	1967
Riabokon', S.	Plt		1968
Riabtsev, V.	SU	N	1975
Salikov, K.	Tank Plt		1974
Savchenko, S.	Tank Plt		1972
Tarasov, A.	Communication	(B)	1968*
Uglev, A.	SU Plt	В	1968
Vatsenko, P.	su		1975
Volodarchik, V.	Engr. SU	В	1969
Yampolskii, A.	SU	(B1)	1972
Zhivykh, S.	MRL SU	P	1965

APPENDIX H.8

Junior Lieutenants and Praporshchik

Name	<u>Unit</u>	Location	Date
Junior Lieutenants:			
C. zhenin, A.	su	(B1)	1972
Zubko, A.	Anti-tank SU		1965
Praporshchik:			
Gara, D.	Food Service		1976*
Golovnev	Training		1974*
Gorchenkov, V.			1976*
Kudriashov, N.		P	1975*
Priimak, I.	Assistant for		1975*
	Technical afi APC Plt	airs	1974*
Stebenev, A.	POL SU		1976*

APPENDIX H.9
Officers (Rank not Identified)

		011.01.1.00	
Name	<u>Unit</u>	Location	Date
Afinogenov, B.	su	(B)	1970
Borisovets, A.	SU		1964
Galkin, A.V.	Political	wkr.	1969*
Grishchenko	នប		1962
Iakushev. N.M.	Political	wkr.	1969*
Il*in	su	:	1962
Kolesnikov, O.	SU	Bl	1971
Korolitskii, A.	ຮບ	N	1970
Koval' A.	Tank SU or	Bn N	1970
Lebedenko, A.	(Bn)	В	1969
Maksimov, A.	Motor trans	sport	1976*
Mishin, M.K.	su	(B)	1968
Mitrofanov, V.		N	1968
Nesterenko, N.	SU	В	1965
Nikulin, I.	SU	Bl	1971
Obniuk			1972
Peftiev, S.	s u		1973
Presniakov, V.	Tank SU	В	1967
Romanov			1972
Sapko, A.	su su	B1	1971 1965

Semenov, V.	Tank SU		1974
Shaigan, N.	su	N	1968
Shchupliakov, V.E.	SU	(P)	1965
Stefantsev, P.	Tank SU	В	1965
Tropotiaga, V.	SU	(B)	1968
Val', V.G.	Training SU		1971*
Vas'kin, I.	su		1965
Veresovyi. K.	SU	B1	1972 1967
Volk, N.	នប		1973
Zaitsev, L.	su		1974

APPENDIX I

Command Structure (Approximate)

Appendices:

- I.1 Command Structure Examples by Year
- I.2 Number of Officers by Year
- I.3 Number of Units/Subunits by Year

Information for this appendix was obtained from data in Appendix H. Those officers in Appendix H with an asteriisk* were not included in this appendix. Those units, locations, and ranks given in parentheses are estimates.

Command Structure Examples by Year

```
1962
                      (unknown)
Subunit
                                       Grishchenko
                                       Il'in
       Subunit
                                 SrLT Manoilenko
       Tank Platoon
                      (unknown)
1963 .
                                       (Lieutenant Colonel)
Subunit
                                   CPT Nabakhtian
       (Company)
                                   LT Milochkin
           Platoon
1965
                        (Pacific)
Subunit
                              (Major) Sysoliatin
        (Company)
                                SrLT Molov
       Subunit
                                       Shchupliakov
                        (Baltic)
Subunit
                                       Nesterenko
Subunit
                                       Sapko
(Company)
(Platoon)
                                  CPT
                                      Steblovskii
                                SrLt Smirnov
1968
                         Baltic
(Battalion)
Subunit or Staff officer
                                LTCOL Arzhanukhin
                                   Maj Baranov
LT Rosliakov
Subunit
(Company)
                                   CPT Ivanov
       Platoon
                                   LT Uglev
                        (Baltic)
(Battalion)
                                       Mishin
                                    LT Khazov
       Subunit
                                  SrLT Ushakov
       Subunit
       Subunit
                                       Tropoti'aga
1970
                        Northern
(Regiment)
                                   COL Pakhomov
       Battalion
                                   Maj Ezzhelenko
            Company
                                  SrLT Golubev
                                 SrLT Makukha
                Platoon
                               (sgt)) Danilov
Korolitskii
                Platoon
            Subunit
```

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Engineer Subunit Tank SU or Bn SrLt Makarov Koval' CPT Kudlo Tank Company COL Sotnikov LTCOL Korolev (Regiment) (Battalion) Maj Boikov SrLT Kasperovich SrLT Tashbaev (Battalion) Tank Company Artillery Battery MRL Subunit CPT Robakidze Baltic (Regiment) COL Koretkov Company SrLT Strunin Tank Subunit LT Glebov Tank Subunit LT Kapitaniuk (Cadet Battalion) (Regiment) COL Laletin Subunit Afinopages Subunit LT Kovtunenko Black Sea Tank Company (Tank) Subunit (SrLT) Takens STLT Cornies Subuni t SRLT Gantarenho Recon Subunit Srla Is bamo: Pacific Battalion LTCOL Nil Laboration STLT Kiell toin (Company) Platoon L'r Por ov (unknown) Che Morav (Company) dr. " Y nonen: Subunit Subunit Same nereger ver vorru Engineer Subunit 1971 Black Sea Regiment LT CULS liatin (Battalion) 3 3 SM SAT Amerikanian (Company or Battalion) Company Platoon The Yapolskii

JrLT Dezhenin Platoon SrLT Tskhovrebov Company SrLT Bashlovin Subunit CPT Tkachev MRL Company Tank Subunit SrLT Korienko LT Oleinik Engineer Subunit LT Grachyov Engineer Subunit Nikulin Subunit Sapko Subunit Kolesnikov Subunit Pacific LTCOL Nilolaienko Battalion SrLT Repetenko Tank Subunit LT Popov Platoon (Baltic) LTCOL Gorokhov (Battalion) LT Samoilov Tank Platoon (unknown) Maj Gagloev (Battalion) SrLT Semko Subunit 1972 (unknown) Lieutenant Colonel ' Battalion LT Korneer Company LT Galanin Platoon LT Zarva Platoon LT Bogomaz Platoon CPT Solomenik (Company) SrLT Trofimenko Tank Company LT Pestov Tank Platoon SrLT Leksiutin Tank Subunit Tank Subunit Tank Platoon SrLT Orlov SrLT Ostrik LT Savchenko Tank Platoon (Baltic) 1973 LTCOL Gorokhov (Battalion) SrLT Samoilov Company SrLT Rodygin Company LT Mukhametzianov

Platoon

LT Fegotychev Platoon LT Samoilov Platoon (promoted to SrLT) Peftiev Subunit (Maj) Domnenko Subunit Volk Subunit (unknown) 1974 Maj Iakovlev Battalion LT Nilov (Tank) Platoon Zaitsev (Battalion) SrLT Estaf'ev Company LT Salikov Tank Platoon Semenov Tank Subunit (unknown) 1975 (LTCOL) Gagloev (Battalion) SrLT Karpenko Tank Company SrLT Bortnikov Tank Platoon SrLT Deliia Tank Platoon LT Balatskii Tank Platoon Pacific 1976 CPT Abramov Company LT Kirianov Platoon CPT Yevsyukov (Company) (Baltic) 1977 Maj Domnenko (Battalion) CPT Volkov (Company) LT Danilov Platoon (unknown) LTCOL Nilulin Battalion SrLT Zarva Company

Tank Platoon

Lt or SrLt

Nilov

APPENDIX 1.2

	Nı	umber	of O	fice	ra by	Year	<u>.</u>	
COL	62	63	64	65	66	67	<u>68</u>	<u>69</u>
LTC			1			2	1	1
MAJ			1	2			3	1
CPT		1	4	3		4	ı	1
SrLT	1		2	2		1	2	5
JrLT/LT		1	2	5		1	5	3
	<u>70</u>	<u>71</u>	<u>72</u>	23	<u>74</u>	75	<u>76</u>	77
COL	8				ı			
LTC	2	3		1		1		1
MAJ	3	5	1	1	1			1
CPT	5	4	1			1	2	1
SrLT	16	8	5	7	1	4	1	2
JrLT/LT	5	5	10	ı	3	3	1	2

This data does not include those officers whose rank was not identified in Appendix H.

Numbe	r of	<u>Units</u>	Subur	nits l	y Ye	ar		
	62	63	64	65	66	67	68	69
Unit								
Subunit	2	1	6	9		7	13	3
Regiment								
Dattalion								1
Company								3
Platoon		1		1			2	1
Tank Subunit			2	3		2		
Tank Company								2
Tank Platoon	1							
	70	27	7 0	ma.	21.	7.6	74	-
	<u>70</u>	71	<u>72</u>	<u>73</u>	14	<u>75</u>	70	77
Unit	7				1			
Subunit	11	12	4	6	1	3	2	2
Regiment	1	1						
Battalion	4	2			1			1
Company	1	3	1	3	1		1	ı
Platoon	2	1	4	2	2		1	2
Tank Subunit	5	3	4		1	1		
Tank Company	4			1		1		
Tank Platoon		1	3		ı	3		1

	<u>64</u>	<u>65</u>	<u>67</u>	<u>69</u>	<u>70</u>	<u>71</u>	<u> 75</u>
Recon Subunit	2				1		
Anti-tank Subun	it	2					
MRL Subunit		1			1	1	1
Mortar Subunit	1		2				
APC Subunit	•	1				1	
Engineer Subuni	t			1	2	2	
UDT Subunit				1		1	
Artillery Batte	ry				1		
Anti-aircraft Battery					1		

APPENDIX J

Order of Battle Characteristics

Appendices:

- J.1 Organizational Structure(Western Sources)
- J.2 Numerical Strength of the Naval Infantry by Year

Organizational Structure (Western Sources)

Many Western sources have presented a basic organizational structure of the Soviet Naval Infantry. Data from several of these sources is presented in this appendix. The entries are grouped by year and the data pertains only to the Soviet Naval Infantry, except where specified for the Polish and East German units.

1968

Johnstone 342

- 3000 men in Pacific area

1970

Breyer (German):343

- 50000 men
- Bulgaria has number of coastal defense battalions patterned on Soviet Naval Infantry.
- ~ Polish have Naval Infantry and coastal artillery which total 6500 men.
- East German naval pioneers, coastal rocket sections, and coastal border brigades.
- Romania has coast defense troops and naval infantry. Cliff: 3^{44}
 - 12000-15000 men organized into brigades are assigned to fleets and two flotillas.
 - -Battalion has 400 men, brigades have 2000 men.

- Brigade has 3 battalions.
- Naval Infantry has at least 3 brigades.
- 2 battalions with attached PT-76 tanks assigned to Danube Flotilla.

Heiman, 345

- Danube Flotilla has 2 battalions.

(German Source):346

- Regiment has three infantry battalions and 1
PT-76 Tank Battalion (with 30 tanks).

1971

Chernogorovi347

- Regiment in Pacific area
- Section within platoon includes section leader, machine gunner, grenade launcher operator, and rifleman.
- Four man tank crew (T-54/55) includes tank commander, driver-mechanic, gun layer, and gun loader.

Couhat: 348

- An infantry battalion with light tanks attached has 500 men.

Eller: 349

- 2 Battalions of Naval Infantry in Danube Flotilla.

Meehan: 350

- Marine brigade in Black Sea area.

- Marine units maintained at 100% strength.
 Strategic Survey(ITSS): 351
- 3000-4000 man brigade assigned to each fleet. Ulstein: 352
 - A total of three Marine Corps Brigades in the Leningrad and Baltic Military Districts.
 - One Soviet (Army) division, one Polish Marine division, and units of an East German division in Baltic area.

1972

Holst (Norwegian): 353

- 6 to 7 brigades distributed among fleets, each brigade has 2000 men.

MccGwire: 354

- 15000 men, consists also of beach reconnaissance and UDT personnel.

Meehan: 355

- 15000 men, possible existence of 30 battalions.
- Danube Flotilla has 2 battalions.
- Amur Flotilla has at least 3 battalions.
- Marine brigade assigned to Black Sea, Baltic and Caspian.
- Major concentration is in Black Sea.
- Naval Infantry organized into brigades vice regiments, since brigades can have 3 or more

battalions. One brigade has at least 5 battalions.

- A battalion has 400 men and is subdivided into 3 companies, each with 100 men.

Pritchard:356

- Each fleet has an approximate equivalent of a USMC Regimental Landing Team, with no formation higher than brigade.
- 15000 men.

Stockell:357

- 15000-19000 men, organized into 2000 man brigades.
- A battalion has less than 400 men, but when reinforced then has 500 men.
- A brigade or regiment consists of 3 battalions plus artillery, transport and other elements and will have 2000 men.
- At least 1 brigade is assigned to the riverine flotillas on the Amur River.
- One Polish amphibious division.

1973

Erickson: 358

- 15000 men, may well be as high as 25000.

1974

Farquharson: 359

- 15000-20000 men, each fleet has 4000 man brigade.
Holst (Norwegian): 360

- Brigade of 2000 men in Northern area. Moulton: 361
 - 17000 men organized into brigades.
 - Each brigade has 3 battalions, with at least one having 5 battalions.
 - One Polish amphibious assault division.
 - One East German (army) infantry brigade.

Takle: 362

- 18000-20000 men, organized into brigades.
- Each brigade has 3 regiments
- Each regiment has 3 battalions and 1 tank battalion. Infantry battalions have 350 men and 33 BTR-60PBs. Tank battalion has 31 PT-76s
- Each brigade has complement of engineers and UDT personnel.
- 4000 men in Northern area.

1975

Chwat: 363

- 12000 men organized into regiments.

-		1965	1975
	Tanks	75	150
	Antillenv	75	150

Moore, A. 364

- 17000 men, projected to 20000 in 1980.
- 2000 men in Northern area.

Moore, J., 365

- 12000 men organized into brigades with a brigade assigned to each fleet.
- Each brigade consists of 10 battalions of 300-400 men each. One battalion is PT-76 battalion with 30 tanks.
- 4000 man Polish Sea Assault Regiment within Polish Navy.

Goodman: 366

- 17000 men organized into brigades.

1976

Erickson: 367

- Naval Infantry brigade located in Northern area.
- Naval brigade consists of 10 battalions, each battalion has 300-400 men; one of the battalions is a tank battalion.

Holst (Norwegian): 368

- 17000 men organized into brigades.

Huitfeldt (Norwegian), 369

- One regiment in Northern area.
- Two regiments, two East German amphibious regiments, and a Polish sea landing division in the Baltic area.

Turbiville: 370

- 17000 men organized into regiments (formerly

referred to as brigades) assigned to fleets and flotillas.

- One Polish amphibious assault division (army).
- Polish naval infantry (navy) with 1000 men.
- East German amphibious trained units. (Scandinavian source): 371
- One regiment in Northern area. Wiener (German), 372
 - 15000 men including higher staffs, support troops, and training elements.
 - One brigade in Northern area.
 - Two brigades in Baltic area.
 - One brigade in Black Sea area.
 - One brigade in Pacific area.
 - Brigades have varying strength: 2 to 4 regiments.
 - Each regiment has:

Regimental headquarters and staff platoons Reconnaissance company

Engineer company

NBC defense platoon

Supply company

Tank battalion

Headquarters and staff platoon Supply platoon

3 tank companies, each with 10 PT-76s

3 infantry battalions

Headquarters and staff platoon Supply platoon

3 infantry companies - 7 APCs
Mortar platoon - 3 x 82mm mortars
Recoilless rifle platoon - 3 x 82mm antitank guns.

- One Polish amphibious assault division(army).
- One East German regiment (army) trained for amphibious operations.

1977

Besch 373

- 20000 men
- 5 brigades each with 4000 men
- Pacific Fleet has 2 brigades while other fleets have 1 brigade.
- Each brigade has 3 infantry battalions, 1 tank battalion, and combat support and service support units.
- Each infantry battalion has 430 men. Tank battalion has 31 PT-76s.
- One Polish amphibious assault division (army), which is "brigade size".
- At least a regimental size East German unit trained in amphibious operations.

Erickson: 374

- Naval Infantry has regimental organization, but are called brigades
- 15000-25000 men
- 3000-4000 in Northern area.

- No Marines in the flotillas.
- One Polish amphibious brigade (called division by Polish) consists of 4000 men.
- One East German regiment trained for amphibious assault including
 - l parachute battalion
 - l amphibious landing battalion
 - 1 special services battalion

(unidentified Norwegian source) 275

- 1500 man brigade in Northern area. Only at Categor; II or III of strength, full strength about 2000 men.
- 2000 men in Baltic area 1500-2000 men in Black Sea area. 1500-2000 men in Pacific area.
- Naval Infantry organized into battalions and brigades. Total strength about 12000.
- East Germans have army units trained for amphibious operations.
- One Polish amphibious assault division with 7500 men.

Military Balance (1970-1976):376

- Polish amphibious assault division(army) (70% strength).
- 1000 marines in Polish Navy.

- (1972) Soviet Naval Infantry organized into brigades.
- (1975) Soviet Naval Infantry organized into regiments.
- (1975) Marine brigade in Northern area.
- (1976) 5 infantry regiments, each regiment has 3 infantry battalions and 1 trnk battalion.

APPENDIX J.2

Numerical Strength of The Naval Infantry by Year

	Military Balance	Other Sources
1964		2000 ³⁷⁷
		4000
		80 000 2/9
1965	3000	10,000
		196,000 ³⁸¹
1966	3000	200
1967	6000	6,000 ³⁸²
1968	8000	in houses
1969	12000	6 000 384 6 000 385
1970	15000	B.000=9.000>°°
		10,000 387
		12,000 388
		50,000 ^{JU}
1971	15000	12,000 390
1972	14000	10,000 391
		12,000-14,000 ³⁹²
		15,000 ³⁷³
		15.000-19,000 ³⁹⁴
1973	17000	15,000
		15,000-19,000 396
		15,000-25,000
1974	17000	15,000-20,000 398
		17,000 399
		18,000-20,000
1975	17000	12,000
		17,000
1976	14500	12,000
		15,000 ⁴⁰⁴ 17,000
		17,000

1977

100,000 406 12,000 407 15,000-25,000 408 17,000 409 20,000 410

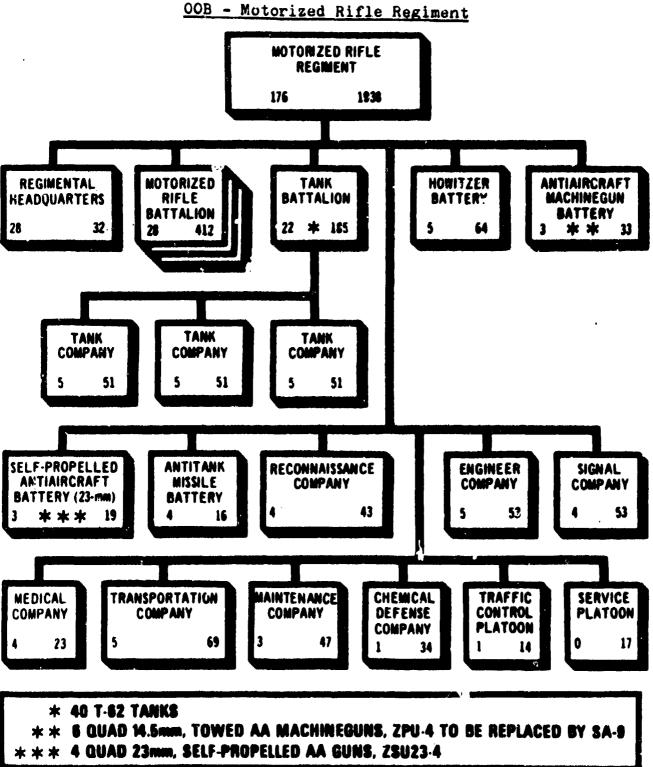
APPENDIX K

Soviet Ground Forces Order of Battle

Appendices

K.1	OOB - Motorized Rifle Regiment 411
K.2	00B - Motorized Rifle Battalion 412
K.3	00B - Motorized Rifle Company 413
K.4	00B - Motorized Rifle Platoon 414
K.5	00B - Tank Battalion415
K.6	00B - Tank Company 416

APPENDIX K.1



KEY EQUIPMENT

31 x Medium Tank

3 x Light Tank (PT-76)

(Approx.) 100 x APC

6 x 122-mm Howitzer

18-24 x 120-mm Mortar

ZSU-23-4 SP Antiaircraft Vehicles

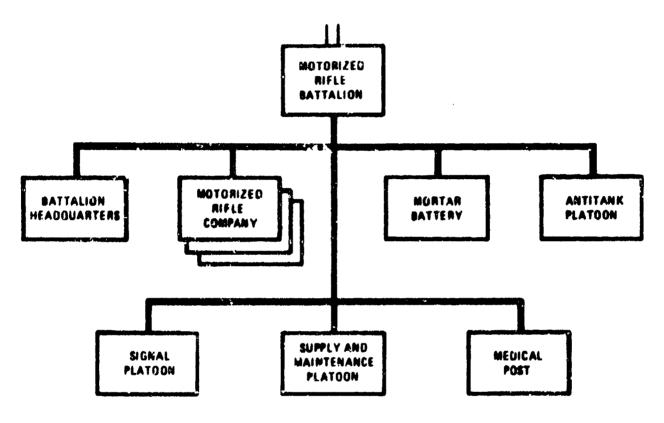
ZU-23 and ZPU-4 Anticierral Machineguna

Anti-tank Guided Missiles

NOTES:

- 1. APCs in motorised rifle regiment of tank division are usually tracked vehicles.
- 2. The Motorised Rifls Regiment may have more than 31 Medium Tanks.
- 3. The process mixture of 28-mm and 14.5-mm AA guns may vary.

APPENDIX K.2 00B - Motorized Rifle Battalion



KEY EQUIPMENT

(Approx.) 31 x APC

6 x 120-mm Mortar

27 x RPK Machinegun

30 x SGM Heavy Machinegun

2 x SPG-9 Recolless AT gun

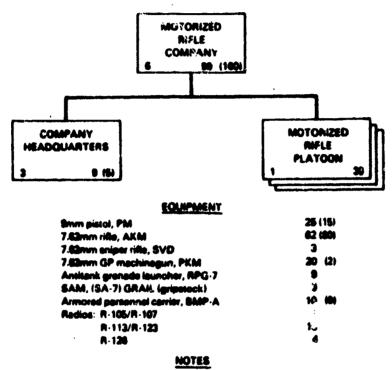
27 x RPG-7 AT Grenade Launcher

SAGGER Manpack ATGM

NOTES:

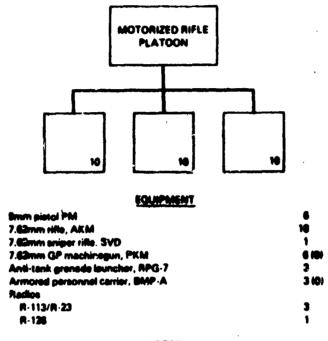
- 1. Battalions equipped with new BMP or BTR-60PB do not mount SGM machineguns, but each BMP has, in addition to a 73-mm main gun, coaxial 7.62-mm machinegun and a SAGGER ATGM launcher.
- 2. SA-7 GRAIL surface-to-air missiles are being introduced to battalion level, and their numbers are uncertain.
- 3. APC drivers are included in the figures for motorized rifle companies.
- 4. The number of APCs in a motorised rifle battalion depends on the type of APC used. Battalions equipped with the BMP have one APC per equad.

APPENDIX K.3 OOB - Motorized Rifle Company



- 1. Figures in parentheses represent the differences in numbers of gureannel, equipment and weapons found in the BTR-equipped motorised rifle company.
- 2. The STR-equipped motorised rifle company has a machinegun section consisting of five enlisted partennel, 9x7.62mm light machineguns (RPK) and 10x8TR-66/66/162 armored personnel carriers lin lieu of the SMP1.

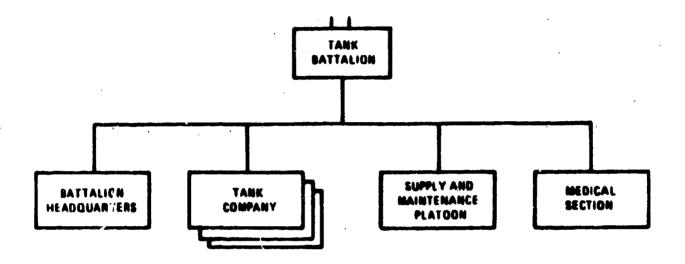
APPENDIX K.4 OOB - Motorized Rifle Platoon



NOTES

- 1. Figures in parentheses represent the differences in numbers of weapons and equipment found in the BTR-equipped motorized rifle platean.
- 2 In lieu of the BMP, the BTR equipped MR platoon has three of the BTR 60/60 or 152 series of APC's.
- 3. In lieu of the PKM, the BTR-equipped MR platoon has 3 RPK light mechineguns.

APPENDIX K.5 OOB - Tank Battalion



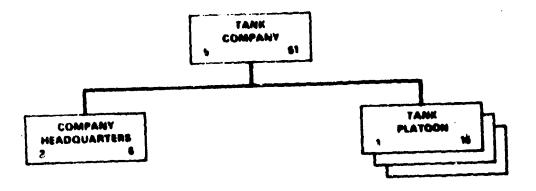
-

- 31 = Medium Tork
- 3 a APC and BERM

NOTES

- funk battellers in materiaed rille regiments may have reser than \$1 tanks.
- Mine clearing devices may be eliated to leading hetations in test operations.

OOB - Tank Company



FOOTNOTES

P. Ia, beregov, et al., <u>Spravochnik Morskogo</u>
<u>Desentnika</u> (<u>Handbook of Naval Landers</u>) (Moskva: MOD,
1975), p. 9, 17.

²Ibid.

3N. Beliakov, 'I Derzost', i Masterstvo" ("Both Daring and Skill"), <u>Krasnaia Zvezda</u>, July 20, 1975, p. 2.

4N. Belous, "Morskaia Pekhota Uchitsia Pobezhoat" ("Naval Infantry Studies To Win"), Kommunist Vooruzhennykh Sil, No. 7 (April, 1968), p. 50.

5K. Kulichenko, "Boi Vedet Morskaia Pekhota" ("Naval Infantry Conducts The Battle"), Krasnaia Zyezda, July 24, 1964, p. 1.

6C.G. Pritchard, "The Soviet Marines", <u>USNI</u> <u>Proceedings</u>, March, 1972, p. 20.

⁷C.G. Jacobsen, "The Soviet Navy: Acquiring Global Capabilities and Perspectives", <u>Naval War College Review</u>, March, 1972, p. 51.

8S. Breyer, "Soviet Power in the Baltic", Military Review, January, 1962, p. 44; U.S. Department of the Army, The Soviet Marine Regiment (Charlottesville, Virginia: Foreign Science and Technology Center, U.S. Department of the Army, February, 1970), p. 1; F. Wiener, The Armies of the Warsaw Pact Nations (Vienna: Carl Ueberreuter Publishers, 1976)p. 84.

9R. W. Herrick, <u>Soviet Naval Strategy</u>, (Annapolis: USNI, 1968), p.

10 Atakuet Morskaia Pekhota" ("Naval Infantry Attacks"), <u>Krasnaia Zvezda</u>, June 11, 1965, p. 1.

11M. MccGwire, ed., Soviet Naval Developments (New York: Praeger Publishers, 1973), p. 164; J.E. Monroe, The Soviet Navy Today (London: MacDonald and Jane's, 1975), p. 239.

¹²Belous, p. 51.

- 13E. W. Besch, "Armored and Other Mechanized Forces Can Be Successfully Adapted To Amphibious Operations", Marine Corps Gazette (April, 1977), p. 42.
 - 14Beregov, et al. p. 14
- 15 Ibid., pp. 34-44; V.E. Sergeenko, <u>Sovetskaia</u>
 Morskaia Pekhota (<u>Soviet Naval Infantry</u>) (<u>Moskva: DOSAAF</u>,
 1971), pp. 3-13.
 - 16 Beregov, et al. p. 17
- 17J.J. Baritz. "The Soviet Strategy of Flexible Response Military Affairs". Bulletin. Institute for the Study of the USSR. Munich, April, 1969. p. 32.
- 18 Sergeenko, p. 57.; N.I. Shablikov, Okean (Ocean) (Moskva: MOD, 1970), p. 56.
- 19P. Ia. Beregov. "Bogatyri v Matrosskikh Bushlatakh" ("Heroes in Sailors Pea-Jackets"), <u>Voennye Znaniia</u>, April, 1974, p. 15.
- 20p.E. Mel'nikov, "Shturm Poberezh'ia" ("Assault of a Sea Const") Sovetskii Patriot, November 2, 1975, p. 2.
- 21 J. D. Pafenberg, <u>Soviet Preinduction Military</u> <u>Training</u> (439th Military Intelligence Detachment, U.S. Department of the Army, May 16, 1974), p. 1.
 - ²²<u>Ibid.</u>, pp. 1, 10, and 16.
 - ²³Sergeenko, p. 54.
- 24N. Polmar, Soviet Naval Power Challenge for the 1970's. (New York: National Strategy Information Center, Inc., 1972), p. 41.
 - ²⁵Pafengerg, pp. 1, 25, and 26.
- 26U.S. Department of the Army, FN-30-40: Handbook On Soviet Ground Forces (Washington, D.C.: Headquarters, Department of the Army, June 30, 1975).
 - 27 Beregov, ("Heroes in Sailors Pea-Jackets"), p. 15.
- 28E. K. Keefe, Area Handbook for the Soviet Union, (Washington, D.C.: U.S. Government Printing Office, 1971) pp. 590 and 594.

- ²⁹Pafengerg, p. 42.
- 30J. Erickson, "Soviet Military Performance: Some Management and Managerial Constraints", Thesis (USARI 7th Annual Soviet Affairs Symposium, Garmisch, Germany, June, 1973), p. 19.
 - 31Sergeenko, p. 54.
- 32 Ibid., p. 53; Baritz, p. 32; and P. E. Mel'nikov, "Soviet Marines", Soviet Military Review, June, 1972, p. 5.
- 33J. S. Marcus, <u>Military Schoo</u>⁷3 for <u>Prospective</u>
 Officers of the Soviet Armed Forces unpublished research
 project (USARI, Garmisch, Germany, March, 1975), pp. 1, 5.
 - 34Keefe, p. 593.
- Joid.; J. Ercikson, "The Soviet Naval High Command", USNI Proceedings, May, 1973, p. 71.; and S. Shapire, "The Blue Water Soviet Naval Officer", USNI Proceedings, February, 1971, pp. 19, 22, and 24.
- 36R. W. Daly, "Soviet Naval Activities 1970", <u>USNI</u> <u>Proceedings</u>, May, 1971, p. 292.
- 37 Ibid.; and V. P. Artemiev, "Soviet Military Institutions", Military Review, January, 1966, p. 11.
- 38 Ibid.; Erickson, "The Soviet Naval High Command", p. 71.; Marcus, p. 8.; and Shapiro, pp. 19, 22, and 24.
- 39Daly, p. 292; Marcus, p. 8; and Shapiro pp. 19. 22, and 24.
- 40 Erickson, "Soviet Military Performance: Some Management and Managerial Constraints", p. 23.
- 41J. A. Fahey, "A Profile of Soviet Military/Naval Schools", <u>USNI Proceedings</u>, August, 1969, p. 135.
 - 42 Ibid.; and Marcus, pp. Appendices.
 - 43 Erickson, "The Soviet Naval High Command", p. 71.
- Mel'nikov, p. 2; Pritchard, p. 21; N. Radchenko, "Desantu Prigotovit'sia!" ("Prepare for the Landing!"), Voennye Znaniia, September, 1975, p. 12.; and L.N. Roitenburd, "Podgotovka Ofitserov Morskoi Pekhoty",

("Training of Officers of The Naval Infantry") Morskoi Shornik, November, 1969, p. 52.

45Mel'nikov, p. 2.

46Pritchard, p. 21.

47No evidence was found to indicate a minimum amount of time which a regular officer must spend on active duty. Evidence did indicate that officers must retire if they are a certain rank and have reached the maximum age for that rank. Therefore, it appears that once a regular officer has entered service, this then becomes his career.

48 Erickson, "The Soviet Naval High Command", p. 72.

49Sergeenko, p. 56.

50V. Gzhel'skii and I. Pavlov, "Boitsy, Zemli, i Moria" ("Warriors, Lands and Seas") Sovetskii Voim, March 5, 1973, p. 14.

51G. H. Turbiville, "Warsaw Pact Amphib Ops in Northern Europe", <u>Marine Corps Gazette</u>, October, 1976, p. 22.

52 Information was obtained from an unidentified Norwegian source.

53 Interview with J. Erickson, USARI, Garmisch, Germany, May 27, 1977.

54 Ibid.; and Wiener, p. 81

55Wiener, p. 83; and L. Heiman, "River Plotillas of the USSR", Military Review, August, 1970, p. 50.

56Heiman, p. 51.

57Although not a major fleet area, the Caspian Sea Flotilla is included only due to its possible function as a training command which may include Marines.

58 Information on the various bases in each of the fleet areas was obtained from two sources: Moore, pp. 38-39; and S. Breyer, <u>Guide To the Soviet Navy</u>. (Annapolis; USNI, 1970), pp. 6-10, 204-221, 238-250.

59Sergeenko, p. 55.

60 Ibid.; and Beregov, et al. (Handbook of Naval Landers), pp. 105-106.

61 Ibid.

62 Beregov. et al. p. 108.

63J.I.H. Owen, ed., Warsaw Pact Infantry and Its Weapons (London: Brassey's Publishers Ltd., 1976, p. 17.

64 Ibid.; Beregov. et al. pp. 105-107; and Shablikov. pp. 133 and 142.

65Sergeenko, p. 55.

66 Ibid.

67 Ibid.; and G. Shutov. "Visiting the Marines", Soviet Military Review, December, 1976, p. 59.

68 Sergeenko, p. 55; Shablikov, p. 127; and "The Marine Corps", Soviet Military Review, June, 1973, p. 48.

69Sergeenko, p. 32.

70 Ibid.; Erickson, "Soviet Military Performance: Some Management and Managerial Constraints", p. 31; Keefe, p. 591; and U.S. Department of the Army, FM 30-40, p. 3-9.

71 Sergeenko, p. 55.

72_{Keefe}, p. 595.

73Sergeenko, p. 55.

74Beregov, ("Heroes in Sailors Pea-Jackets"). p. 15.

75Beregov. et al. (Handbook of Naval Landers). pp. 94-103; and Sergeenko, p. 55.

76"How is Life, Soldier?", Soviet Military Review, February, 1972, p. 13.

77 Ibid.

78_{K. Pumkarev and E. Shcheglov, "S Morskim Desantom"} ("With a Naval Landing"), <u>Tyl i Snabzhenie</u>, October, 1976, p. 37.

790wen, p. 17.

80 Erickson, "Soviet Military Performance: Some Management and Managerial Constraints", p. 42.

81 Pumkarev. p. 38.

82. How is Life, Soldier?, p. 14.

83U.S. Department of the Army, <u>FM 30-40</u>, p. 6-127.

84 Pumkarev. p. 38.

85Sergeenko, p. 58; and "Soldaty Moria" ("Soldiers of the Sea"), Voennye Znaniia, April, 1977, p. 35.

86Shutov, p. 59.

87M. Solomenik, "Atakuiushchie s Moria" ("Attackers From the Sea") Voennye Znaniia, May, 1973, p. 11.

88U.S. Department of the Army, <u>FM 30-40</u>, p. 3-9.

89M.L. Harvey and F.D Kohler, ed. "USSR Navy Shows the Flag", Soviet World Outlook, December 15, 1976, p. 8.

90 Sergeenko, p. 14.

91K. Kulichenko, "(Picture of Soviet Marine APCs and Tanks in a Landing Exercise)", <u>Krasnaia Zvezda</u>, June 6, 1965, p. 1.

92_{Belous. p. 53.}

93C.L. Parnell, "'Sever' and the Baltic Bottleneck", USNI Proceedings, August, 1969, p. 31.

94Sergeenko, p. 57.

95Shablikov, p. 160; N. Chernogorov, Soviet Military Review, July, 1971, p. 7.; and P.E. Mel'nikov, "Morskaia Pekhota" ("Naval Landing") Morskoi Sbornik, December, 1971, p. 27.

96Solomenik, p. 11.

97K. Kulichenko, "(Picture of a Soviet Marine Officer)" Krasnaia Zvezda, August 12, 1964, p. 59.

98G.A. Bronevitskogo, et al., Voina, Okean, Chelovek (War, Ocean, Nan.) (Moskva: MOD, 1974), p. 185.

99Shapiro, p. 22.

100 Shablikov, p. 160.

101 Iu. Mokeev, "Nebo i Bereg" (Sky and Shore), Fravda, May 4, 1970, p. 2.

102A.A. Laletin, "Sovremennaia Morskaia Pekhota" ("Modern Naval Infantry"), Morskoi Sbornik, November, 1965, p. 30.

103Roitenburd, p. 55.

104 Shablikov. p. 19.

105 Erickson, "Soviet Military Performance: Some Management and Managerial Constraints", p. 21.

106 Rumkarev, p. 38.

107Chernogorov, p. 7.

108K. Kulichenko, "(Picture of a Soviet Marine Tank Officer)", Krasnaia Zvezda, July 29, 1964, p. 1.

109A.N. Sunaev, "Nadezhnyi Pomoshchnik v Boin", ("Reliable Assistant in Battle"), Morskoi Sbornik, May, 1971, p. 39.

110 Keefe, p. 594.

111 Sergeenko, p. 59; and Solomenik, p. 11.

112v. Chepigi, N. Chernogorov, and V. Sherengovogo, "Na Beregu Velikogo Stoim" ("On the Great Shore, We Stand") Sovetskii Voin, December 24, 1970, p. 40.

113Keefe, p. 594.

114 Erickson, "Soviet Military Performance: Some Management and Managerial Constraints", p. 21.

115Kulichenko, (August 12, 1964), p. 3.; and K. Kulichenko, "(Picture of a Soviet Marine Tank Officer)", Krasnaia Zvezda, August 29, 1964, p. 2.

- 116R. M. Frasche, The Soviet Motorized Rifle Company, (Washington, D.C.: Defense Intelligence Agency, 1976), p. 125.
 - 117 Ibid.
 - 118 Beregov, (Handbook of Naval Landers), p. 88.
- 119 Shutov, "Visiting the Marines", p. 59; and V. Gorokhov, "Daring and Resolve", Soviet Military Review, August, 1974, p. 35.
 - 120 Mel'nikov, "Soviet Marines", p. 5.
 - 121 Mel'niko, ("Naval Infantry"), p. 25.
 - 122 Pafenburg, p. 14.
- 123 Ibid., p. 16; Erickson, "Soviet Military Performance: Some Management and Managerial Constraints", pp. 18-19; and U.S. Department of the Army, FM 30-40, p. 3-11.
 - 124 Pafenburg. p. 14.
- 125Beregov, ("Heroes in Sailors Pea-Jackets"), p. 15; and Solomenik, p. 11.
 - 126 Sergeenko, p. 53.
- 127Polmar, Soviet Naval Power Challenge for the 1970's, p. 41; "Okeanskii Strazh Strany Sovetov" ("Ocean Guard of the Country of Soviets") Kommunist Vooruzhennykh Sil, July 13, 1974, p. 37; and N. Stepanishchev, "Shagi k Moriu" ("Steps Towards the Sea"), Kommunist Vooruzhennykh Sil, December, 1976
 - 128 Pafenburg, p. 24,
 - 129 Sergeenko, p. 53.
- 130_M. Shashuto, "Brat Moria" ("Brother of the Sea"), <u>Krasnaia Zvezda</u>, October 20, 1973, p. 2.
 - 131 Pafenburg, p. 45.
 - 132 Sergeenko, p. 55.

133L. Noga, "Sovetskaia Morskaia Pekhota" ("Soviet Naval Infantry"), <u>Voennye Znaniia</u>, January, 1972, p. 9.

134 Sergeenko, p. 55.

135 Ibid.

136D.K. Cliff, "Soviet Naval Infantry: A New Capability?". Naval War College Review, June, 1971, p. 97.

137 J.F. Meehan, The Soviet "Marine Corps," unpublished research project (USARI, Garmisch, Germany, February, 1972) p. 13.

138 Shablikov, p. 159.

139Gorokhov, "Daring and Resolve", p. 35.

140 Mel'nikov, "Soviet Marines", p. 5.

141Beregov, (Handbook of Naval Landers), p. 90.

142A. Ia. Korotkov, "Uchebnaia Praktika. Voprosy, Vzliady, Problemy" ("Training Practice. Questions, Views, Problems"), Morskoi Sbornik, March, 1971, p. 40.

143v. Ermolaev and P. Mel'nikov, "Sovetskaia Morskaia Pekhota" ("Soviet Naval Infantry") Voennye Znaniia, October, 1969, p. 31; and Iu. Pakhomov, "(Ficture of Soviet Marines During An Exercise)", Morskoi Sbornik, January, 1977, inside front cover.

144 Turbiville, "Warsaw Pact Amphib Ops in Northern Europe", p. 27.

145 Sergeenko. p. 35.

146p.Ia. Beregov, "Sea Landing Operation", Military Herald, No. 6(1974), p. 44.

147 Meehan, The Soviet "Marine Corps", p. 16.

148 Solomenik, p. 11.

149 Sergeenko, pp. 21 and 37.

150 Beregov, (Handbook of Naval Landers), p. 97.

¹⁵¹Frasche, p. 36.

```
152 Ibid., p. 39.
```

- 153 Pumkarev, p. 37
- 154 Ermolaev and Mel'nikov, p. 31.
- 155 Bronevitskogo, p. 187.
- 156 "Soldaty Moria", p. 34.
- 157 Beregov. ("Heroes in Sailors Pea-Jackets"), p. 14.
- 158 Beregov, (Handbook of Naval Landers), p. 94.
- 159_{Sunaev. p. 41.}
- 160_{Ibid}. p. 39.
- 161 Ibid., p. 40; and Bronevitskogo, p. 191.
- 162 Bronevitskogo, p. 192; and Sunaev, p. 38.
- 163 Shutov, "Visiting the Marines", p. 58.
- 164Bronevitskogo, p. 191.
- 165p.V. Kukushkin, Batal'on v Morskom Desante (Battalion In A Naval Landing), (Noskva: MOD, 1972), p. 93.
 - 166 Sergeenko, p. 33.
 - 167 Bronevitskogo, p. 190.
- 168Kh. Gimadeev, "V Morskom Desante" ("In A Naval Landing") Kommunist Vooruzhennykh Sil, No. 14 (July, 1968) p. 51.
 - 169 Shablikov, p. 19.
 - 170 Artemiev, p. 12.
 - ¹⁷¹Fahey, p. 135.
 - 172 Frasche, p. 23.
 - 173_{Ibid}.
 - 174 Shapiro, p. 24.

175 (Ficture of a Soviet Naval Landing). Krasnaia Zvezda, May 10, 1970, p. 2.

176Kurotkov, p. 39.

177Roitenburd, p. 52.

178 Ibid.; and Pritchard, p. 21.

179Roitenburd, p. 52.

180<u>Ibid</u>., p. 53.

181 Erickson, "Soviet Naval High Command", p. 74.

182 Gzhel'skii, p. 16.

183_{Artemiev}, p. 12.

184 Iu. Dmitriev, "Korabli Vozvrashchaiutsia v Bazy" ("The Ships Return to the Bases") Trud. May 6, 1970, p. 4.

185 Chepigi, p. 40.

186 Breyer, p. 197.

187N. Ozerov, "(Picture of a Soviet Marine Mortar Unit)" Krasnaia Zvezda, June 28, 1967, p. 2.

188 Sergeenko, p. 27.

189. Boi: Vedet Morskaia Pekhota ("Naval Infantry Conducts the Battle") Krasnaia Zvezda, July 24, 1964, p. 2.

190 MccGwire, Soviet Naval Developments, p. 174.

191 Chernogorov, p. 6.

192 Sergeenko, p. 27.

193 Beregov, (Handbook of Naval Landers), p. 103.

194_{Noga, p. 9.}

195K. Kulichenko, "(Picture of Soviet Marines With an Anti-tank Gun)", Krasnaia Zvezda, June 29, 1965, p. 2.

196 "Soldaty Moria", p. 35.

197Besch. p. 43.

198K. Kulichenko, "(Picture of Soviet Marines With a Wheeled Anti-aircraft Gun)", Krasnaia Zvezda, June 13, 1967, p. 2.

199 Chepigi, p. 38.

200 Besch. p. 45; and The Military Balance 1976/77 (London: IISS, 1976), p. 14.

201K. Kulichenko, "(Picture of a Soviet Marine Mortar Crew)", <u>Krasnaia Zvezda</u>, August 22, 1964, p. 2.

202 Besch, p. 43.

²⁰³Noga, p. 9.

204 Beregov. (Handbook of Naval Landers), p. 105.

205K. Kulichenko, "(Picture of Soviet Marines with Multi-Rocket Launcher and Truck)", Krasnaia Zvezda, June 18, 1965, p. 2.

206 Besch. p. 43.

207 Meehan, The Soviet "Marine Corps", p. 33.

208 Sergeenko, p. 22.

209_{Cliff. p. 96.}

Leaving a Beach)", <u>Krasnaia Zvezda</u>, July 2, 1967, p. 1.

²¹¹Sergeenko, p. 25.

212_{Noga}, p. 9.

213 Meehan, The Soviet "Marine Corps", p. 13.

214R. Bonds, ed. The Soviet War Machine (London: Hamlyn Publishing Group, Ltd., 1976), p. 153. and J.E. Moors, ed., Jane's Fighting Ships 1976-77 (New York: Franklin Watts, Inc., 1976), p. 685.

215Unless specifically annotated, information for the characteristics of the amphibious ships was obtained from the following four sources: Breyer; Cliff; Moore, The Soviet Navy; and Moulton.

216 F.P. Hoeber and W. Schneider, ed., Arms, Men and Lilitary Budgets (New York: Crane, Russak & Co., 1976) p. 62.; and Iu. A. Pratcleev, "Nekotorye Voprosy Deistvii Flota v Sovremennoi Voine" ("Several Questions of the Operations of the Fleet in a Modern War") Morskoi Sbornik, February, 1966, p. 32.

217 The Military Balance 1976/1977. p. 89; J.E. Moore, ed., Janes's Fighting Ships 1975-76 (New York: Franklin Watts Inc., 1975), pp. 151, 278; and "Polish Landing Craft Used for Commando Operations", USNI Proceedings, April, 1974, p. 126.

218R.D. Manners, R.B. Ryan, and N.R. Sumner, <u>Artic</u>
Surface Effect Vehicles Vol. I An <u>Overview of SEV</u>
Development (McLean, Virginia: Science Applications, Inc., 1974) Chapter 5, p. 5.

219<u>Ibid</u>. p. 5-9

220 Soldaty Moria", p. 35.

221 Boevaia Zrelost' ("Combat Maturity") <u>Sovetskii</u> <u>Voin</u>, December, 1974, p. 11.

222A. J. Doublet, <u>The Air Cushion Vehicle and Its</u> Future Applicability in National Defense, Thesis (Air War College, April, 1976), p. 53.

223 Laletin, p. 31.

224S.G. Gorshkov, Morskaia Moshch' Gosudarstva (Sea Might of the State) (Moskva: MOD, 1976) p. 326.

225 Sunaev, p. 40.

226 Shablikov, p. 158.

227Roitenburd, p. 54.

228N. Polmar, "The Soviet Aircraft Carrier", USNI Proceedings, May, 1974, p. 159.

229N. Polmar, "Scviet Naval Aviation", Air Force Magazine, March, 1976, p. 73.

230 Breyer, p. 334.

231 Bonds, p. 91.

- 232U. S. Department of the Army. FM 30-40, p. 6-96.
- 233 Wiener, p. 349.
- 234J.W.R. Taylor, "Gallery of Soviet Aerospace Weapons", Air Force Magazine, March, 1976, p. 102.
- 2350nly the month and year of the exercise is provided, unless exact information is known about the specific dates. Where the information was unclear, then the date of the article was used for the exercise.
 - 236Gzhel'skii, p. 15, and Solomenik, p. 11.
- 237 B. Briukhanov, "Pekhota Atakuet s Moria" ("Infantry attacks From the Sea") <u>Krasnaia Zvezda</u>, October 11, 1962, p. 1.
- 238N. Alekseev and N. Shalagin, "Soldaty Shturmuiut bereg" ("Soldiers Storm The Shore") Krasnaja Zvezda, October 10, 1963, p. 1.
- 239Kulichenko, ("Naval Infantry Conducts The Battle"), p. 1.
- 240 Tass, "Na Sovmestnykh Ucheniiakh" ("In Joint Exercises") Krasnaia Zvezda, September 22, 1964, p. 1.
- 241"(Picture of GDR BTR-152 Exiting From Landing Ship)" Krasnaia Zvezda, May 22, 1965, p. 5.
- 242K. Kulichenko, "(Picture of Soviet Marine APCs With Two Officers)", Krasnaia Zvezda, May 26, 1965, p. 1.
 - ²⁴³Kulichenko, June 6, 1965, p. 1.
 - 244 Laletin, p. 31. Data in parentheses is approximate.
- 245N. Shestakov, "Atakuet Morskaia Pekhota" ("Naval Infantry Attacks") <u>Voennye Znanjia</u>, November, 1965, p. 10.
 - 246 MccGwire, Soviet Naval Developments, p. 164.
- 247 Ibid., p. 171; and T.W. Wolfe, Soviet Power and Europe 1965-1969 (Santa Monice: The Rand Corporation, 1969), p. 544.
- 248 K. Kulichenko, "(Picture of a Soviet Marine Political Officer Talking With a Group of Soviet Marines)" Krasnaia Zvezda, May 30, 1967, p. 2.

- Wolfe, Soviet Navel Developments, p. 17; and Wolfe, Soviet Power and Europe 1965-1969, p. 545.
- 250 C.G. Jocobsen, <u>Joviet Strategy-Soviet Foreign</u>
 Lolicy (Glasgow: Robert MacLehose & Co. Ltd. 1972),
 pp. 128 and 138.
- 251 Tass, "Sovmentine Uchenie" ("Joint Exercise") Krasnaia Zvezda, August 29, 1967, p. 1.
- 252 vaf. "U Nashikh Boevykh Druzei" ("At Our Fighting Friends") <u>Krashala Zvezda</u>, September 17, 1967, p. 3.
- 253 Turbiville, "Warsaw Pact Amphib Ops in Northern Europe", p. 24.
- 254 Parnell, p. 28; and G. Shutov, "Na Komandno Shtabnom Uchenii "Sever"" ("At The Command-Staff Exercise "Sever"") Krasnaio Zvezda, July 17, 1968, p. 1.
 - 255 Parnell, p. 28; and Sergeenko, p. 40.
- 256G. Shutov. "(Picture of a Soviet Marine Officer and Several Marines)" <u>Krasnaia Zvezda</u>, August 6, 1968, p. 2.
- 257E. Ermakov, "Vy Prisnli Kak Druz'ia i Brat'ia" ("You Came As Friends and Brothers") <u>Krasnaia Zvezda</u>, September 4, 1968, p. 1.
- 258U.S. Department of the Army, The Soviet Marine Regiment, p. 1.
- 259 Jacobsen, Soviet Strategy-Soviet Foreign Policy, p. 131, 139, and 154.
- 260G.D. Vernon, The Soviet Strategy of Flexible Response, unpublished research paper (USARI, Garmisch, Germany, May, 1970), p. 32.
- 261 E. Marchenko and G. Shutova, "(Picture of Soviet Marines In an Amphibious Landing Exercise)", <u>Krasnaia</u> Zvezda, July 31, 1969, p. 2.
- 262S.A. Borzenko, "Desantniki" (Landers") Morskoi Sbornik, May, 1970, p. 34.
 - 263_{Vernon, p. 32.}

264 Pritchard, p. 21.

205D. Parihall, Russian Sea Power, (Boston: Gambit, Inc., 1971), p. 218.; and G. Shutov, "(Picture of a Soviet Marine Officer)", Krasnaiz Zvezda, October 1, 1969, p. 1.

266K. Kulichenko, "(Picture of An Amphibious Landing Operation With Landing Ships and APCs)" Krasnaia Zvezda, November 2, 1969, p. 2.

267 Sergeenko, p. 37.

268 Breyer, p. 198.

269 Kukushkin, p. 103.

270 Moulton, p. 141; Polmar, "The Soviet Aircraft Carrier", p. 158; Pumkarev, p. 36; Sergeenko, p. 45; and Shablikov, p. 126-134.

271 Korotkov, p. 39; Sergeenko, p. 49; and Turbiville, "Warsaw Pact Amphib Ops in Northern Europe", p. 24.

272 Sergeenko, p. 50.

273 Soviet Manuevers Summarized, <u>USNI Proceedings</u>, November, 1970, p. 101.

274Daly, p. 292.

275 Sergeenko, p. 51.

276Daly, p. 287; Turbiville, "Warsaw Pact Amphib Ops in Northern Europe", p. 24 and 27; and V. Peredel'skii and G. Semenikhin, 'Sila Velikogo Bratstva" ("Strength of the Great Brotherhood") Sovetskii Voin, December, 1970, p. 21.

²⁷⁷Chepigi. p. 37.

278 Mel'nikov, ("Naval Infantry"), p. 28; and Sunaev, p. 40,

279 Mel'nikov, "Soviet Marines", p. 6; and J.F. Meehan, "Soviet Maneuvers: Summer 1971", Military Review, April, 1972, p. 19.

280 Chernogorov, p. 7.

- 281 I. Lysenko, "Athkuet Morskaia Pekhota" ("Naval Infantry Attacks") <u>Voennye Znaniia</u>, August, 1971, p. 10.
- 282A. Tsymbal, "Tanki Atakuiut's Moria" ("Tanka Attack From the Sea") Morskol Sbornik, March, 1972, p. 65.
 - 283 Mel'nikov, "Soviet Marines", p. 7.
- 284D. Korolev, "Landing Ship Commanding Officer", Soviet Military Review, November, 1972, p. 26.
- 285 Turbiville, "Warsaw Pact Amphio Ops in Northern Europe", p. 24.
 - 286 Gzhel'skii, p. 15.
- 287S. Sokholov, "Tanki Atakuiut s Moria" ("Tanks Attack From the Sea") Morskoi Sbornik, December, 1973, p. 39.
- 288 V. Iakovlev, "Gremela Ataka" ("The Attack Thundered") Sovetskii Voin, November, 1974, p. 26.
- 289U.S. Army CGSC, The Leavenworth Assessment of the Warsaw Pact Threat in Central Europe (Fort Leavenworth, Kansas: Threats Division, CGSC, U.S. Department of the Army, July 1, 1976) Volume IV, p. 1.
- 290_{M.A.} Walton and B.W. Watson, "Okean-75" <u>USNI</u> <u>Proceedings</u>, July, 1976, p. 96.
- 291N. Iorzh, "A Blow From the Sea" Soviet Military Review, December, 1975, p. 14.
- 292I. Sysoliakin, "Seaborne Landing", Soviet Military Review, February, 1976, p. 32.
- 293 "Guarding the Peace", The Current Digest of the Soviet Press, October 6, 1976, p. 17.
 - 294 Shutov, "Visiting the Marines", p. 59.
- 295D. Haworth, "Denmark Feels the Heat of Warsaw Pact Baltic Exercises", <u>USNI Proceedings</u>, March, 1977, p. 109.
 - 296 Pakhomov, January, 1977, p. inside front cover.

- 297N. Gagleev, "Nastupaet Rota Morskoi Pekhoty" ("A Company of Naval Infantry Attacks") Voennyi Vestnik February, 1977, p. 9.
- 298 This information was obtained from an unidentified Norwegian source.
 - 299"Soldaty Moria", p. 34.
 - 300 Meehan, The Soviet "Marine Corps", p. 12.
- 301 Breyer, p. 12; Erickson, "The Soviet Naval High Command", p. 71; and Moore, The Soviet Navy Today, p. 41.
 - 302_{Daly. p. 289.}
- 303 Erickson, "The Soviet Naval High Command", p.72; and Erickson, "Soviet Naval Infantry", Personal interview.
 - 304 Beregov, (Handbook of Naval Landers), p. 10.
 - 305 Daly, p. 291.
 - 306 Breyer. p. 13.
- 307A.M. Prokhorov. <u>Bol'shaia Sovetskaia Entsiklopediia</u> (<u>Large Soviet Encyclopedia</u>)(<u>Moskva: Soviet Encyclopedia</u>, Vol. 16, 1974, p. 586.
- 308 Bronevitskogo, p. 188; Chernogorov, p. 7; and M. Loshchits, M. Korenevskii, and N. Radchenko, "Morskoi Desant" ("Naval Landing") <u>Krasnaia Zvezda</u>, June 17, 1971, p. 2.
- Besch, p. 42; and MccGwire, Soviet Naval Developments, p. 165.
- Baritz, "The Soviet Strategy of Flexible Response", p. 32; Pritchard, p. 21; and U.S. Department of the Army, The Soviet Marine Regiment, p. 1.
 - 311_{Wiener. p. 87.}
 - 312 Meehan, The Soviet "Marine Corps", p. 1.
 - 313 Wiener, p. 87.
- 314C.L. Donnelly, "The Soviet Desant Concept", International Defense Review, December, 1971, p. 544.

- 315Bonds, p. 176; Hoeber, p. 155; and Wiener, p. 59.
- Breyer, pp. 204, 215, 218, 244, and 248; N. Kurov, "Victory Beyond the Polar Circle", Soviet Military Review, November, 1974, p. 52, and E. Wegener, The Soviet Naval Offensive, (Annapolis, USNI, 1975), p. 29.
- 317"Polish Landing Craft Used For Commando Operations", p. 126; and "Infantry Landing Craft Poland", Military Heview, November, 1973, p. 96.
- January 17, 1977. p. 9.; W.R. Hynes, "The Role of the Kiev in Soviet Naval Operations", Naval War College Review, Fall, 1976, p. 43; and H. Stanhope, "New Soviet Carrier No Match For US Ships", London Times, November 19, 1976, p. 1.
- 319 J.A. Wyras. Soviet Maritime Strategy Since World War II, unpublished Master's thesis (Niagara University, New York, December, 1972), p. 44.
- 320 "Sormovich Air Cushion Vehicle Production is Set for 1975", USNI Proceedings, December, 1973, p. 123.
- 321 Hynes, p. 40; Stanhope, p. 1.; and J. Lawton, "Aircraft Carrier Joins Soviet Fleet", Washington Post, July19, 1976, p. 1.
- 322W. Beecher, "Soviets Said To Be Building A Second Aircraft Carrier", <u>USNI Proceedings</u>, June, 1973, p. 113.
- 323 MccGwire, Soviet Naval Developments, p. 174; and J.L. Couhat, and P. Masson, "The Soviet Presence in the Mediterranean: A Short History", Naval War College Review, January, 1971, p. 64.
 - 324 Fairhall, p. 218.
 - 325 Wegener, p. 80.
- 326 "Six Landing Craft Joining Russian Mideast Fleet", Evening Star (Washington, D.C.) March 6, 1970, p. 1.
- 327_{I.C.} Kidd, Jr., "View From the Bridge of the Sixth Fleet Flagship", <u>USNI Proceedings</u>, February, 1972, p. 26.

- 3281.C. Kidd, Jr., "A Look At U.S.-Soviet Rivalry in the Mediterranean", U.S. News and World Report, November 15, 1971, p. 111.
 - 329 MccGwire, Soviet Naval Developments, p. 174.
 - 330 Hoeber, p. 59.
 - 331 Moore, The Soviet Navy Today, p. 240.
- 332G. Jukes, "The Indian Ocean in Soviet Naval Policy", Adelphi Papers, No. 87 (May, 1972), p. 25.
 - 333_{Ibid., p. 25.}
- 334E.J. Gannon, "Military Considerations in the Indian Ocean", <u>Current History</u>, November, 1972, p. 221.
 - 335_{Hoeber}, p. 59.
 - 336 Moore, The Soviet Navy Today, p. 240.
- 337 Polmar, Soviet Naval Power Challenge for the 1970's, p. 51.
 - 338 MccGwire, Soviet Naval Developments, p. 133.
 - 339 Hoeber, p. 59.
 - 340 Manthorpe, p. 207.
- 341 The Soviet Threat to Nato's Northern Flank, (London: Foreign Affairs Research Institute, No. 14, 1976), p. 4.
- 342W.C. Johnstone, The Balance of Power in the Asian-Pacific Area, C. 1980 (Washington, D.C.: The Washington Center of Foreign Policy Research, 1968) appendix ii, p. 35.
 - 343 Breyer, p. 10, 239, 243, 248, and 250.
 - 344Cliff, pp. 95-96, and 98.
 - 345 Heiman, p. 50.
- 346U.S. Department of the Army, The Soviet Marine Regiment, p. 1.

- 347 Chernogorov, p. 7.
- 348 Couhat, p. 64.
- 349 E.M. Eller, The Soviet Sea Challenge, (USA: Cowles Book Co., 1971), p. 209.
 - 350 Meehan, "Soviet Maneuvers: Summer 1971", p. 20.
- 351 "Strategic Survey 1971" (London: International Institute for Strategic Studies, 1972), p. 29.
- 352_E. Ulstein, "Nordic Security", Adelphi Papers, No. 81 (November, 1971), p. 12.
- 353_{J.J.} Holst, "The Soviet Build-up in the North-East Atlantic", <u>Survival</u>, Jan/February, 1972, p. 26.
 - 354 MccGwire, Soviet Naval Developments, p. 165.
 - 355 Meehan, The Soviet Marine Corps, pp. 11 and 19.
 - 356 Pritchard, pp. 19 and 21.
 - 357 MccGwire, Soviet Naval Developments, oo. 172-174.
 - 358 Erickson, "The Soviet Naval High Command", p. 69.
- 359w.J. Farquharson, "Russia's Sea-Going Might!" Armed Forces Journal, August, 1974, pp. 33 and 36.
- 360A. Beaufre, st al., Strategy for the West, (New York: Crane, Russak and Co.Inc., 1974)p. 164.
 - 361 Moulton, p. 127.
- 362 E.P. Takle, "Soviet Naval Infantry", RUSI, June, 1975, pp. 29-30.
- 363 United States/Soviet Military Balance A Frame of Reference for Congress (Washington, D.C.: U.S. Government Printing Office, Jan 21, 1976), p. 44.
 - 364 Hoeber, pp. 68 and 156.
 - 365 Moore, The Soviet Navy Today, pp. 239-241.
- 366J.T. Goodman, The Chinese Perception of the Spectrum of the Sino-Soviet Territorial Conflict (U.S. Naval Postgraduate School, Monterey, California, March,

1975), pp. 260-261.

367 Erickson, "The Northern Theatre (TVD) Soviet Capabilities and Concepts", RUSI, December, 1976, p. 17. (Erickson stated in recent interview that the number of battalions (10) was incorrect).

368 Power At Sea Super-powers and Navies, Adelphi Papers, Vol II, Spring, 1976, p. 9.

369 Power at Sea Competition and Conflict, Adelphi Papers, Vol III, Spring, 1976, p. 13.

370 Turbiville, "Warsaw Pact Amphib Ops in Northern Europe", p. 20.

371 The Soviet Threat to Nato's Northern Flank, p. 1.

372_{Wiener, pp. 85-86}.

373Besch, pp. 42, 43, and 45.

374 Erickson, "Soviet Naval Infantry", personal interview.

375This information was obtained from an unidentified Norwegian source.

376 The Military Balance 1976/77, p. 14; The Military Balance 1972/73 (London: IISS, 1972), p. 8; "The Soviet Union and Warsaw Pact" (Military Balance 1975/76) Air Force Magazine, December, 1975, p. 51.; and "The Theatre Balance Between NATO and the Warsaw Pact" (Military Balance) Air Force Magazine, December, 1975, p. 97.

377_{Cliff, p. 95}.

378 Wyras, p. 19.

379"USSR Naval Forces", Military Review, July, 1964, p. 105.

380 Chwat, p. 44.

381 "USSR Soviet Marine Corps", Military Review. September, 1965, p. 106.

382"Nato Looking Southward", <u>Time</u>, December 22, 1967, p. 25.

383 Russia Power Play on the Oceans", Time, February 23, 1968, p. 19.

384D.R. Cox "Sea Power and Soviet Foreign Policy", USNI Proceedings, June, 1969, p. 43.

385 Meenan, The Soviet "Marine Corps", p. 3; and T.W. Wolfe, "The Soviet Military Since Khrushchev", Current History, October, 1969, p. 225.

386J.C. Hurewitz, Changing Military Perspectives
In the Middle East, (Santa Monica: The Rand Corporation, September, 1970), p. 11.

387D.W. Mitchell, "The Soviet Naval Challenge", Orbis, Spring, 1970, p. 135.

388C. Gasteyger, "World Politics on the Seven Seas". Survival, March, 1970, p. 94.; and J.D. Hessman, "Countdown to Crisis European Scenario: The Balance Shifts Eastward", Armed Forces Journal, July 4, 1970, p. 19.

389 Breyer, p. 10.

390 Fairhall, p. 195.

391N. Polmar, "Alarmist Versus Realist", Atlantic Community Quarterly, Fall, 1972, p. 369.

392_{Holst}, p. 26.

393 MccGwire, Soviet Naval Developments, p. 165; Meehan, The Soviet "Marine Corps", p. 19; Polmar, Soviet Naval Power Challenge for the 1970's; Pritchard, p. 19; and B.M. Blechman, The Changing Soviet Navy, (Washington, D.C.: Brookings Institution, 1973), p. 25.

394 MccGwire, Soviet Naval Developments, p. 172.

395 The Soviet Navy", The Economist, March 3, 1973, p. 18.

396w. Beecher, "Gorshkov Papers Signify New Russian Naval Doctrine", Sea Power, May, 1973. p. 16.

397 Erickson, "The Soviet Naval High Command", p. 69. 398 Farquharson, p. 33.

399 Moulton, p. 127.

400 Takie, p. 29

401 Chwat, p. 44; and Moore, The Soviet Navy Today, p. 239.

Voennale Doktrine i Strategija (Garmisch: USARI, 1975/1976) Chapter 13, p. 3.

Halance Shifts in Favor of Russia", Armed Forces Journal, March, 1976, p. 18.

404 Hynes, p. 42; and Wiener, p. 85.

405 Turbiville, "Warsaw Pact Amphib Ops in Northern Europe", p. 20.

406_{Owen, p. 9.}

407 This information was obtained from an unidentified Norwegian source.

408 Erickson, "Soviet Naval Infantry", personal interview.

409K. Labich, "Russia's Blue-Water Bid", Newsweek, February 21, 1977, p. 9.

410 Besch. p. 42.

411 U.S. Department of the Army, FM 30-40, p. A-7; and TC 30-4 The Motorized Rifle Regiment, (Washington, D.C.: TRADOC, U.S. Department of the Army, June, 1975), p. 3.

412U.S. Department of the Army, <u>FM 30-40</u>, p. A-7; and <u>Military Operations of the Soviet Army</u> (Arlington, Virginia: Office of the Assistant Chief of Staff for Intelligence, U.S. Dept. of the Army, May, 1976), p. 1 54.

413Frasche, p. 18.

414 Ibid., p. 55.

415U.S. Department of the Army, FM 30-40, p. A-13; and Military Operations of the Soviet Army, p. 172.

416A.E. Momesley, Soviet Tank Company Tactics. (Washington, D.C.: Defense Intelligence Agency, May, 1976), p. 2.

BIBLIOGRAPHY

Soviet Sources

- A History of The Art of Naval Warfare USSR, Arlington, Virginia, JPRS 52287 (translation) January 29, 1971.
- Akimov, A. "A Battalion In a Seaborne Landing", Soviet Military Review, March, 1976, pp. 22-24.
- Akimov, A. "Along A Sea Coast", Soviet Military Review, July, 1975, pp. 24-26.
- Alekseev, G. and Gusarov, M. "Vozhdenie BMP v Slozhnykh Usloviiakh" ("The Driving of A BMP In Complicated Conditions"), Tekhnika i Vooruzhenie, July, 1976, p. 30.
- Alekseev, N. and Shalagin, N. "Soldaty Shturmuiut Bereg", (Soldiers Storm The Shore"), <u>Krasnaia Zvezda</u>, October 10, 1963, p. 1.
- Askerova, Ia. "(Picture of The "Moskva")", Sovetskii Voin, April, 1971, pp. 28-29.
- "Atakuet Morskaia Pekhota" ("Naval Infantry Attacks"), Krasnaia Zvazda, June 11, 1965, p. 1.
- "Atakuem Morskaia Pekhota" ("Naval Infantry Attacks"), <u>Sovetskii Voin</u>, July, 1974, p. 9.
- Balavintsev, L. "V Morskom Desante" ("In A Naval Landing")
 <u>Tekhnika i Vooruzhenic</u>, September, 1972, p. 33.
- Beliakov, N. "I Derzost', i Masterstvo" ("Both Daring and Skill"), <u>Krasnaia Zvezda</u>, July 20, 1975, p. 2.
- Belous, N. "Morskaia Pekhota Uchitsia Pobezhoat'"
 ("Naval Infantry Studies To Win"), Kommunist
 Vooruzhennykh Sil, No. 7, April, 1968, pp. 50-55.
- Belov, M. "Combat Employment of Helicopters At Sea", Soviet Military Review, February, 1975, pp. 22-24.
- Belov, M. "Helicopters and Land Force Tactics", Soviet
 Military Review, December, 1976, pp. 22-24

- Military Review, April, 1976, pp. 30-31, 34.
- belov, M. "Vertolety Na Korabliakh i Na Beregu", (Helicopters On Ships And On Shore"), <u>Krasnaia</u>
 <u>Zvezda</u>, January 13, 1971, p. 3.
- Beregov, P. Ia, "Bogatyri v Matrosskikh Bushlatakh", ("Heroes In Sailors Pea-Jackets"), <u>Voennye Znanlia</u>, April, 1974, pp. 14-15.
- Eeregov, P. Ia. "Sea Landing Operation", Military Herald, (translated from Voennyi Vestnik #6, 1974. pp. 19-26), pp. 32-45.
- Beregov, P. la., et al. Spravochnik Morskoge Desantnika, (Handbook of Naval Landers), Moskvak MOD, 1975.
- Bereznikov, V. and Zuenko, S. "Gruzy Podaiutsia Na Neoborudovannoe Poberezh'e", ("Cargo Will Move To The Unequipped Ses Coast"), <u>Tyl i Snabzhenie</u>, November, 1976, pp. 73-77.
- Bochkarev, M. *V Baze i v More ("At The Base And At Sea"), Tyl i Snabshenie, May, 1975, pp. 83-85.
- "Boevaia Vyuchka Morskoi Pekhoty", ("Battle Training of The Naval Infantry"), <u>Krasnaia Zvezda</u>, July 23, 1971, p. 1.
- "Boevaia Zrelust'" ("Combat Maturity"), Sovetskii Voin, December, 1974, p. 12.
- "Boevoi Put' i Traditsii Chasti, Korablia, Soedineniia", ("Combat Voyage And Traditions Of A Unit, Ship Ana Unit"), Kommunist Vooruzhennykh Sil, October, 1975, pp. 72-76.
- "Boi Vedet Morskaia Pokhota" ("Naval Infantry Conducts The Battle"), <u>Krasnaia Zvezda</u>, July 24, 1964, p. ?.
- "Boi Vedet Morskaia Pekhota" ("Naval Infantry Conducts The Battle"), <u>Krasnaia Zvezda</u>, July 24, 1964, p. 3.
- Borzenko, S.A. "Desantniki" ("Landers"), Morskoi Sbornik, May, 1970, pp. 34-41.

- Borzenko, S.A. "Deviatyi Val" ("Tenth Wave"), <u>Pravda</u>, February 10, 1968, p. 3.
- Borzenko, S.A. "Stremitel' Nye Desanty" ("Swift Landings"), Pravda, September 26, 1969, p. 4.
- Briukhanov, B. "Pekhota Atakuet S Moria" ("Infantry Attacks From The Sea"), <u>Krasnaia Zvezda</u>, October 11, 1962, p. 1.
- Bronevitskogo, G.A., et al. Voina, Okean, Chelovek, (War, Ocean, Nan), Moskva: MOD, 1974.
- Bystrov, S. "Spasibo Tebe, Komandir!" ("Thank you, Commander!"), Sovetskii Yoin, April, 1971, pp. 5-6.
- Chebotaev, M. "Kogda More i Bereg v Ogne" ("When The Sea And Shore Are in Fire"), Kommunist
 Vcoruzhennykh Sil, July, 1972, pp. 42-45.
- Chepigi, V., Chernogorov, N. and S' rengovogo, V.,
 "Na Beregu Velikogo Stoim" 'On The Great Shore,
 We Stand"), Sovetskii Voin, December, 1970,
 pp. 37-40.
- Chernogorov, N. "Marines Attack", Soviet Military Review, July, 1971, pp. 6-7.
- Chernomorskii, G. "Pekhota Ne Prostaia" ("Infantry Is Not Easy"), Pravda Ukrainy, June 18, 1974, p. 4.
- Chernous'ko, L. "Groza Podvodnykh Khishchnikov" ("Terror of The Underwater Plunderer"), Kazakhstanskaia Pravda, Jyly 24, 1969, p. 4.
- Chernous'ko, L. "Kreicor 'Moskva'" ("The Cruiser 'Koskva'"), <u>Pravda Ukrainy</u>, July 25, 1969, p. 4.
- Chuiko, L., Novikov, M., and Shashuto, M. "Vysoty 'Okean'" ("Heights of 'Okean'"), <u>Krasnaia</u>
 <u>Zvyzda</u>, Mzy 12, 1970, p. 3.
- Davydov, A. and Drozd, E. "Remont Bronetransportera" ("Repair of An Armoured Carrier"), <u>Teknnika</u> i <u>Yoorushenie</u>, December, 1974, pp. 26-27.

- "December 5th Constitution of The USSR Day", Soviet Military Review, December, 1976, p. 14.
- Dmitriev. Iu. "Boevoi Ekzamen" ("Combat Examination"), Trud. April 29, 1970, p. 4.
- Dmitriev, Iu. "Korabli Vozvrashchaiutsia v Bazy" ("The Ships Return To The Bases"), <u>Trud</u>, May 6, 1970, p. 4.
- Dmitriev, Iu. "Na Vakhte Otvazhnye" ("On Watch Are The Courageous"). Trud, April 17, 1970, p. 4.
- Dmitriev, Iu. "Pos Flagom Rodiny" ("Under The Flag of The Motherland"), <u>Trud</u>, April 14, 1970, p. 4.
- Efimuk, M. "V Morskom Desante" ("In A Naval Landing"), Krasnaia Zvezda, August 31, 1968, p. 2.
- Egorov, G. "Krasnoznamennyi Severnyi Flot Na Vakhte" ("The Decorated With The Order of The Red Banner' Northern Fleet Is On Watch"), Morskoi Sbornik, June, 1973, pp. 3-9.
- Ermakov, E. "Vy Prishli Kak Druz'iz i Brat'ia" ("You Came As Friends and Brothers"), <u>Krasnaia Zvezda</u>, September 4, 1968, p. 1.
- Ermolaev, V. and Mel'nikov, P. "Sovetskaia Morskaia Pekhota" ("Soviet Naval Infantry"), <u>Voennye</u> <u>Znaniia</u>, Ocyober, 1969, pp. 30-31.
- Ermolaev, V. and Panov, I. "Vse Okeany Riadom" ("All The Oceans Are Near"), <u>Krasnaia Zvezda</u>, April 28, 1970, p. 1.
- Erzh, N. "(Picture of A Soviet Naval Landing)", Sovetskii Voin, January, 1976, back cover.
- Gagloev, N. "Nastupaet Rota Morskoi Pekhoty" ("A Company of Naval Infantry Attacks"), <u>Voennyi Vestnik</u>, February, 1977, pp. 93-96.
- Gimadesv, Kh. "V Morskom Desante" ("In A Naval Landing"), <u>Kommunist Vooruzhennykh Sil</u>, July, 1968, No. 14, pp. 51-55.
- Godun, G. "Coast Reconnaissance", Soviet Military Review, December, 1975, pp. 16-17.

- Gol'tsev, V. "Boevoi Ekzamen" ("Combat Examination"), <u>Izvestiia</u>, April 17, 1970, p. 3.
- Gol'tsev, V. "Desanty Shturmuiut Bereg" ("The Landers Storm The Shore"), <u>Izvestiia</u>, April 30, 1970, p. 4.
- Goncharov, N. "Znachenie Reshenii 2401 S"ezda KPSS Dlia Dal'neishego Povysheniia Tekhnicheskoi Osnashchennosti Armii i Plota" ("Significance of The Decisions of The 24th Congress of CPSU Por The Further Rise Of The Technical Equipment of The Army And Navy"), Kommunist Vocruzhennykh Sil, November, 1971, pp. 59-64.
- Gordeev, N.P. Maskirovka v Boevykh Deistvijakh Flota (Camouflage In Combat Operations Of The Fleet) Moskva: NOD, 1971.
- Gorianov, A. "Gvardeitsy Morskoi Pekhota" ("Guardsmen Of The Naval Infantry"), <u>Voennye Znaniia</u>, September, 1975, p. 12.
- Gorokhov, V., "Daring And Resolve", Soviet Military Review, August, 1974, pp. 34-35.
- Gorokhov, V. "Rozhdenie Boevoi Derzosti" ("Birth of Combat Daring"), <u>Krasnaia Zvezda</u>, November, 29, 1973. p. 2.
- Gorshkov, S.G. Morskaia Moshch' Gosudarstva, (Sea Might Of The State), Moskva: MOD, 1976.
- Gorshkov, S.G. "Navies In War And Peace", <u>USNI</u>
 <u>Proceedings</u>, October, 1974, pp. 56-65.
- Gorshkov, S.G. "Navies In War And Peace", <u>USNI</u>
 Proceedings, November, 1974, pp. 55-69.
- Gorshkov, S.G. "Razvitie Sovetskogo Voenno-Morskogo Iskusstva" ("Development of Soviet Naval Art"), Morskoi Sbornik, February, 1967, pp. 9-21.
- Gorshkov, S.G. "Vazhneishii Faktor Boegotovnosti i Boesposobnosti Flota" ("An Extremely Important Factor Of The Fighting Randiness And Fighting Efficiency Of The Fleet"), Tyl i Snabzhenie.
 July, 1976, pp. 2-9.

- Griaznov, M. "Funkty Moiki Bronetankovoi Tekhniki" ("Points Of Washing of Armoured Equipment"), Teknika i Vooruzhenic, October, 1976, pp. 36-37.
- Gribachev, N. and Stadniuk, I. <u>Dnepr</u> (<u>Dnepr</u>), Moska: MOD, 1968.
- Gribov, V., Iakutin, L., and Udovichenko, E. "Otchizny Vernye Syny" ("Faithful Sons of The Motherland"), Sovetskii Voin, January, 1977, p. 27.
- Grishanov, V. "Boevoi Raport Voennykh Moriakov" ("Combat Report Of The Military Sailors"), Kommunist Vooruzhennykh Sil. July, 1970, pp. 24-29.
- Grishanov, V. "Komsomol Shef Voenno-Morskogo Plota" ("Comsomol Patron Of The Naval Fleet"),

 Kommunist Vooruzhennykh Sil, October, 1972,
 pp. 27-34.
- Grishanov, V.M. *Okeanskii Strazh Sovetskoi Gtchizny*
 (*Ucean Guard Of The Soviet Motherland*),
 Sovetskii Voin, July 13, 1970, pp. 2-4.
- "Guarding The Peace", The Current Digest Of The Soviet Press (translated from Izvestiia, September 8, 1976, p. 3.), October 6, 1976, p. 17.
- Gusev, O. and Malinin, V. "Nepobedimoe Oruzhie" ("Invincible Weapon"), Pravda, June 12, 1971, p. 6.
- Gzhel'skii, V. and Pavlov, I. "Boitsy, Zemli, i Moria" ("Warriors, Lands And Seas"), Sovetskii Voin, March 5, 1973, pp. 14-16.
- "How Is Life, Soldier?", Soviet Military Review, February, 1972, pp. 12-14.
- Iakutin, L. "(Picture Of Soviet Marines Attacking)",
 Soviet Military Review, June, 1976, inside
 front cover.
- Iakutin, L. "(Picture Of Soviet Marines Attacking During An Exercise)", Morskoi Sbornik, June, 1974, p. 48.

- Iaremchenko, A. "Obespechivaia Boevye Korabli" ("While Providing Combat Ships"), <u>Tyl i Snabzhenie</u>, June, 1970, pp. 43-35.
- "In USSR Ministry Of Defense", The Current Digest Of The Soviet Press, (translated from Pravda, May 24, 1976, p. 4), June 23, 1976, p. 22.
- lorzh, N. "A Blow From The Sea", Soviet Military Review, December, 1975, pp. 14-15.
- Kaliakin, B. "Podgotovka Pomoshchnikov Komandirov Korablei" ("Training Of The Assistants Of Commanders Of Ships")

 Tyl i Snabzhenie, March, 1975, pp. 34-38.
- Karpatov, V. "Sovetskii Vyshel Na Okeanskikh Prostorakh" ("The Soviet Went Out On The Ocean Examination"), Kommunist Vooruzhenykh Sil, June 11, 1971, 7, 92.
- Karpenko, V. "Komandirskoe Pradvidenie" ("Commander's Foresight"), Sovetskii Voin, December 24, 1975, pp. 26-27.
- Kartashev, R.D. <u>Posobie Po Voerno-Morskomu Delu</u>. (<u>Textbook</u> <u>On Naval Business</u>), Moskva: DOSAAF, 1955.
- Kasatonov, V. "Tyl Flota v 'Okeane'" ("The Rear Of The Fleet In The 'Okean'"), Tyl i Snabzhenie, July, 1970, pp. 2-7.
- Khamov, V. and Lukashevich, V. "Pobratimy" ("Adopted Brothers"), Sovetskii Voin, January 1, 1970, pp. 16-17.
- Khavoronkov, G. and Tkachev, V. "In An Amphibious Assault", <u>Military Herald</u>, (translated from Voennyi Vestnik, #9, 1976), pp. 180-186.
- Khmurzhinskii, Z. "U Nashikh Boevykh Druzei" ("At Our Fighting Friends"), <u>Krasnaia Zvezda</u>, September 1 : 1969, p. 3.

- Kirin, I. "Raise The Offensive Tempos", Military Review, February, 1975, pp. 51-55.
- Kolatinskii, A. "(Picture Of Soviet Tank Officer With Enlisted Men And Tank)", <u>Krasnaia Zvezda</u>, October 12, 1963, p. 5.
- Kontievskii, A. "Okeanskii Mili 'Leningrada'" ("Ocean Miles Of The 'Leningrad'"), <u>Tekhnika i Vooruzhenie</u>, December, 1972, p. 14.
- Korolev, D. "Landing Ship Commanding Officer", Soviet Military Review, November, 1972, pp. 26-27.
- Korolev, D. "(Picture Of A Soviet Marines Marching In A Parade)", <u>Voennye Znaniia</u>, July, 1968, p. 3.
- Korolev, D. "V Edinom Poryve" ("In A United Rush"), <u>Krasnaia Zvezda</u>, October 17, 1970, ρ. 1.
- Korotkov, A.Ia. "Uchebnaia Praktika. Voprosy, Vzgliady, Problemy" ("Training Practice. Questions, Views, Problems"), Morskoi Sbornik, March, 1971, pp. 39-41.
- Kotov, P. "Na Strazhe Morskikh Rubezhei" ("On Guard Of The Naval Borders"), <u>Tekhnika i Vooruzhenia</u>, July, 1976. pp. 1-4.
- Krivoshien, G. "The T-55 Tank", Soviet Military Rev. aw, May, 1974, pp. 20-21.
- Kukushkin, P.V. <u>Batal'on v Morskom Desante</u>, (<u>Battalion In A Naval Landing</u>), Moskva: MOD, 1972.
- Kulichenko, K. "Boi Vedet Mcrskaia Pekhota" ("Naval Infantry Conducts The Battle"), Krasnaia Zvezda, July 24, 1964, p. 1.
- Kulichenko, K. "Idet Boevaia Ucheba" (Combat Training Is Proceeding"), <u>Krasnaia Zvezda</u>, June 6. 1967, p. 1.
- Kulichenko, K. "(Picture Of An Amphibious Landing Operation With Landing Ships And APCs)", <u>Krasnaia Zvezda</u>, November 2, 1969, p. 2.
- Kulichenko, K. "(Picture Of Λ Soviet Amphibious Landing With Landing Ships And Tanks)", <u>Krasnaia Zvezda</u>, June 23, 1957, p. 2.

- Kulichenko, K. "(Picture Of A Soviet Amphibious Landing With Landing Ships and Tanks)", <u>Krasnaia Zvezda</u>, September 20, 1967, p. 1.
- Kulichenko, K. "(Picture Of A Soviet Marine APC)", Krasnaia Zvezda, September 19, 1964, p. 2.
- Kulichenko, K. "(Picture Of A Soviet Marine APC Loading Onto Landing Ship From The Beach)", <u>Krasnaia</u> <u>2vezda</u>, July 10, 1968, p. 2.
- Kulichenko, K. "(Picture Of A Soviet Marine Mortar Crew)", Krasnaia Zvezda, August 22, 1964, p. 2.
- Kulichenko, K. "(Picture Of A Soviet Marine Mortar Crew)", Krasnaia Zvezda, September 16, 1967, p. 2.
- Kulichenko, K. "(Picture Of A Soviet Marine Officer)", Krasnaia Zvezda, August 12, 1964, p. 3.
- Kulichenko, K. "(Picture Of A Soviet Marine Officer)", <u>Krasnaia Zvezda</u>, September 16, 1964. p. 1.
- Kulichenko, K. "(Picture Of A Soviet Marine Officer)", Krasnaia Zvezda, August 31, 1968, p. 1.
- Kulichenko, K. "(Picture Of A Soviet Marine Officer And Enlisted Men With Tanks)", <u>Krasnaia Zvezda</u>, September 1, 1968, p. 3.
- Kulichenko, K. "(Picture Of A Soviet Marine Officer Briefing Enlisted Men)", <u>Krasnaia Zvezda</u>, August 7, 1964, p. 3.
- Kulichenko, K. "(Picture Of A Soviet Marine Political Officer Talking With A Group Of Soviet Marines)", Krasnaia Zvezda, May 30, 1967, p. 2.
- Kulichenko, K. "(Picture Of A Soviet Marine Tank Officer)", Krasnaia Zvezda, July 29, 1964, p. 1.
- Kulichenko, K. "(Picture Of A Soviet Marine Tank Officer)", <u>Krasnaia Zvezda</u>, August 29, 1964, p. 2.
- Kulichenko, K. "(Picture Of A Seviet Marine Tank Officer)", Krasnaia Zvezda, September 24, 1969, p. 2.

- Kulichenko, K. "(Picture Of Soviet Marine APCs and Tanks In A Landing Exercise)", <u>Krasnaia Zvezda</u>, June 6, 1965, p. 1.
- Kulichenko, K. "(Picture Of Soviet Marine APCs In An Amphibious Landing Exercise)", <u>Krasnaia Zvezda</u>, August 9, 1967, p. 1.
- Kulichenko, K. "(Picture Of Soviet Marine APC's Leaving A Beach)", <u>Krasnaia Zvezda</u>, July 2, 1967, p. 1.
- Kulichenko, K. "(Picture Of Soviet Marine APC's With Two Officers)", <u>Krasnaia Zvezda</u>, May 26, 1965, p. 1.
- Kulichenko, K. "(Picture Of Soviet Marine Tanks Crossing A Water Obstacle)", <u>Krasnaja Zvezda</u>, July 13, 1967, p. 1.
- Kulichenko, K. "(Picture Of Soviet Marines Climbing A Hill)", <u>Krasnaia Zvezda</u>, June 9, 1967, p. 2.
- Kulichenko, K. "(Picture Of Soviet Marines With A Wheeled Anti-Aircraft Gun)", <u>Krasnaia Zvezda</u>, June 13, 1967, p. 2.
- Kulichenko, K. "(Picture Of Soviet Marines With An Antitank Gun)", <u>Krasnaia Zvezda</u>, June 29, 1965, p. 2.
- Kulichenko, K. "(Picture Of Soviet Marines With Antitank Guns)", <u>Krasnaia Zvezda</u>, June 2, 1965, p. 2.
- Kulichenko, K. "(Picture Of Soviet Marines With APC's)", Krasnaia Zvezda, June 24, 1967, p. 2.
- Kulichenko, K. "(Picture Of Soviet Marines With Multi-Rocket Launches And Truck)", Krasnaia Zvezda, June 18, 1965, p. 2.
- Kulichenko, K. "V Raionakh Manevrov" ("In The Areas Of Manuevers"), <u>Krasnaia Zvezda</u>, April 29, 1970, p. 1.
- Kulish, V.M. Military Force And International Relations, Arlington, Virginia: JPRS 58947 (translation of Russian Book, 1972) May 8, 1973.

- Kuniaev, V. "(Picture Of Military Formation Of Soviet Marines)", Krasnaia Zvezda, July 19, 1968, p. 1.
- Kurov, N. "Victory Beyond The Polar Circle", Soviet Military Review, November, 1974, pp. 52-54.
- Kuznetsov, I. and Zhabrov, V. "Plavaiushchie Mashiny" ("Swimming Vehicles"), <u>Tekhnika i Vooruzhenie</u>, August, 1972, p. 15.
- Laletin, A.A. "Sovremennaia Morskaia Pekhota" ("Modern Naval Infantry"), Morskoi Sbornik, November, 1965, pp. 27-32.
- Laptev, A. "Obrabotka Transportnykh Sudov v Reidovykh Usloviiakh s Pomoshch'iu Plavsredstv" ("The Processing Of Transport Ships In Raiding Conditions With The Help Of Navigation Means"), Tyl i Snabzhenie, April, 1971, pp. 75-78.
- Lavrov, K. and Sokha, D. "Korabli Na Vozdushnoi Podushke" ("Ships On An Air Cushion"), <u>Voennye Znaniia</u>, April, 1977, pp. 40-41.
- Lebedev, V. "Amphibious Landing Operations", Soviet Military Review, February, 1973, pp. 17-19.
- Liasenko, A. "Uchatsia Severomortsy" ("Northern Sailors Are Studying"), <u>Tyl i Snabzhenie</u>, June. 1970, pp. 45-47.
- Loshchits, M. "Na Sredizemnomorskoi Eskadre", ("In The Mediterranean Squadron"), <u>Krasnaia Zvezda</u>, June 15, 1971, p. 2.
- Loshchits, M. Korenevskii, M. and Radchenko, N. "Morskoi Desant", ("Naval Landing"), Krasnaia Zvezda,
 June 17, 1971, pp. 1-2.
- Lysenko, I. "Atakuet Morskaia Pekhota" ("Naval Infantry Attacks"), <u>Voennye Znaniia</u>, August, 1971, p. 10.
- Maksimov, K. "Zavoz Gruzov Morem v Otdalennye Garnizony" ("Delivery of Cargo By Sea To Distant Garrisons"), Tyl i Snabzhenie, June, 1970, pp. 74-78.
- Malinochka, P. "Gruzy Nostavliaem Morskim Transportom" ("Cargo Is Delivered By Naval Transport"),

 Tyl i Snabzhenie, June, 1971, pp. 75-77.

- Mal'tsev, P. "(Picture Of Soviet Marines Attacking During An Exercise)", <u>Morskoi Sbornik</u>, December, 1971, p. 16.
- Mamaev, E. "Morskie Desanty v Vek Iadernogo Oruzhiia"
 ("Naval Landings In The Age Of The Nuclear Weapon")
 Krasnaia Zvezda, July 16, 1968, p. 3.
- Marchenko, E. and Shutova, G. "(Picture Of Soviet Marine APCs and Tanks Coming Ashore)" (Krasnaia Zvezda, July 24, 1969, p. 2.
- Marchenko, E. and Shutova, G. "(Picture Of Soviet Marines In An Amphibious Landing Exercise)", Krasnaia Zvezda, July 31, 1969, p. 2.
- Mel'nikov, P.E. "Morskaia Pekhota" ("Naval Infantry")
 Morskoi Sbornik, December, 1971, pp. 24-28.
- Mel'nikov, P.E. "Shturm Poberezh'ia" ("Assault Of A Sea Coast") Sovetskii Patriot, November 2, 1975, p. 2.
- Mel'nikov, P.E. "Soviet Marines", Soviet Military Review, June, 1972, pp. 5-7.
- Milhailin, V.V. "Peredovio Opyt Deistvii v Morskikh Pokhodakh-v Praktiku Obucheniia Spetsialistov Tyla" ("Progressive Methods Of Operations In A Naval Cruise In Practice Of The Training Of Specialists Of The Rear") Tyl i Snabzhenie, January, 1974, pp. 21-27.
- Mikhailin, V.V. "Sea Watch", The Current Digest Of
 The Soviet Press (translated from Trud, July 25,
 1976, p. 4.) September 8, 1976, p. 22.
- Milhailov, N. "(Picture Of Soviet Marines In A Tactical Exercise)", <u>Krasnaia Zvezda</u>, July 28, 1974, p. 2.
- Minchenia, A., Shenberg, V., and Zhivotovskii, A.

 "The Sormovich Experimental Air Cushion Vehicle"

 Rechnoi Transport, (DDC AdAO12 080 translated
 by Naval Intelligence Support Center, Washington,
 D.C., May 28, 1975) No. 3, 1973, pp. 53-54.
- "Moguchii Flot Sovetskoi Otchizny" (The Mighty Fleet Of The Soviet Motherland") Kommunist Vooruzhenrykh Sil, July 13, 1973, pp. 39-43.

- Mokeev, Iu. "Nebo i Bereg" ("Sky and Shore"), Pravda, May 4, 1970.
- Moskalenko, D. "Sviaz' v Morskom Desante" ("Communications In A Naval Landing") <u>Voennyi Vestnik</u>, May, 1974, pp. 107-111.
- "Na Boevoi Vakhte v Moriakh i Okeanakh" ("On Combat Watch The Seas And Oceans") Kommunist Vooruzhennykh Sil, June 12, 1972, pp. 32-36.
- Na Rumbakh Muzhestva i Masterstva" ("On The Points of Courage And Skill") <u>Krasnaia Zvezda</u>, April 14, 1970, p. 1.
- "Na Rumbakh Sredizemnogo" ("On The Points Of The Mediterranean") Sovetskii Voin, May 9, 1972, p. 12.
- "Na Strazhe Mira i Sotsializma" ("On Guard of Peace And Soliaism") Kommunict Vooruzhennykh Sil, January 2, 1974, pp. 34-38.
- "Na Strazhe Morskikh Rubezhei" ("On Guard Of The Naval Borders") Kommunist Vooruzhenykh Sil, June 12, 1971, pp. 36-41.
- "Na Uchebnykh Poliakh Aerodromakh v More" ("On The Exercise Grounds, at Airfields, At Sea") Tyli Snabzhenie, June, 1971, pp. 2-7.
- "Nauchno-Tekhnicheskii Progress i ego Rol' v Povyshenii Boevoi Moshchi Armii i Flota" ("Scientific-Technical Progress And Its Role In The Rise Of The Combat Might Of The Army And Navy") Kommunist Vooruzhennykh Sil, November 21, 1974, pp. 67-74.
- Nilolaev, S. "Tylovoe Obespechenie Morskikh Desantnykh Operatsii v VMS S ShA" ("Rear Support Of Naval Landing Operations In The Navy Of The U.S.")

 Tyl i Snabzhenie, October, 1974, pp. 90-93.
- Noge, L. "Sovetskaia Morskaia Pekhota" ("Soviet Naval Infantry") <u>Voennye Znaniia</u>, January, 1972, pp. 8-9.
- Novikov, M. "Na Vsekh Meridianakh Planety" ("In All The Meridians Of The Planet") <u>Krasnaia Zvezda</u>, May 9, 1970, p. 3.

- Novikov, V. "Okeanskii Dal'nego Plavaniia" ("The Ocean Is Of A Long Voyage") <u>Tekhnika i Vooruzhenie</u>, July, 1971, pp. 2-5.
- "Okean" Maneuvers Of The USSR Navy Conducted In April/ May 1970, Arlington, Virginia, JPRS 52844 (translation) April 9, 1971.
- "Okeanskaia Vakhta Voennykh Moriakov" ("Okean Watch Of The Military Sailors") Kommunist Vooruzhennykh Sil, July 13, 1976, pp. 16-22.
- "Okeanskii Strazh Strany Sovetov" ("Ocean Guard Of The Country Of Soviets") Kommunist Vooruzhennykh Sil. July 13, 1974, pp. 33-37.
- Oleinik, G. "Ekzamenuium Moria i Okeany" ("They Examine The Seas And Oceans") Tyl i Snabzhenie, June, 1970, pp. 41-43.
- Oleinik, G. "Morskim Pokhodam-Otlichnoe Obespechenie" ("To Naval Cruises Excellent Provision") Tyli Snabzhenie, July, 1971, pp. 26-31.
- Ol'shtynskii, L. "Sovmestnye Deistviia Flota i Sukhoputnykh Voisk v Nastupatel'nykh Operatsiiakh"
 ("Joint Operations Of The Fleet And Land Forces
 In Offensive Operations") Morskoi Sbornik,
 February, 1973, pp. 29-35.
- Ol'shtynskii, L. "Zakhvat Voenno-Morskikh Baz v Khode Nastupatel'nykh Oneratsii" ("Capture Of A Naval Base In The Course Of An Offensive Operation") Morskoi Sbornik, November, 1974, pp. 20-26.
- Cherov, N. "(Picture Of A Soviet Marine Mortar Unit)" Krasnaia Zvezda, June 28, 1967, p. 2.
- Ozerov, N. "(Picture Of A Soviet Marine Tank)" <u>Krasnaia</u> <u>Zvezda</u>, May 30, 1965, p. 1.
- Pakhomov, Iu. "(Picture Of Soviet Marines Attacking During An Exercise)" Murskoi Sbornik, September, 1976, p. 48.
- Pakhomov, Iu. "(Picture Of Soviet Marines During And Exercise)" Morskoi Sbornik, January, 1977, inside front cover.

- Panov, I. "Okean", Soviet Military Review, August, 1971, pp. 55-56.
- Panov, I. "Srazhenie v Poliarnykh Shirotakh", ("Battle In the Polar Latitudes") Pravda, April 30, 1970, p. 6.
- Panteleev, Iu. A. "Nekotorye Voprosy Deistvii Plota v Sovremennoi Voine" ("Several Questions of the Operations of the Fleet in a Modern War") Morskoi Sbornik, February, 1966, pp. 27-34.
- Peredel'skii, V. and Semenikhin, G. "Sila Velikogo Bratstva" ("Strength of The Great Brotherhood") Sovetskii Voin, December 24, 1970, pp. 21-24.
- Peresada, V. "Clumsy Attempts", The Current Digest of The Soviet Press (translated from Pravda, June 29, 1975, p.5), July 23, 1975, p. 15.
- "(Picture of An Amphibious Landing Exercise)". Soviet Military Review. April, 1972, p. 32.
- "(Picture Of an Amphibious Landing Exercise)". Soviet Military Review, October, 1971, inside front cover.
- "(Picture of GDR BTR-152 Exiting From Landing Ship)", Krasnaia Zvezda, May 22, 1965, p. 5.
- "(Picture Of a Soviet ACV During a Landing Exercise)", Sovetskii Voin, July 13, 1975, p. 11.
- "(Picture of a Soviet Marine PT-76 Tank Attacking)", <u>Sovetskii Voin</u>, No. 7, 1977, inside front cover.
- "(Picture of a Soviet Marine Tank During a Landing Exercise)", Morskoi Sbornik, February, 1968, p. 11.
- "(Picture of Soviet Marines)", Znamenosets, May, 1975, p. 31.
- "(Picture of Soviet Marines In a Landing Exercise with An Armoured Vehicle)", Morskoi Sbornik, July, 1967, pp. 10, 17.
- "(Picture of Soviet Marines Using Gas Masks During a Naval Landing)", <u>Sovetskii Voin</u>, March 6, 1974, inside back cover.

- "(Picture of Soviet Naval Infantry)", Sovetskii Voin.
 May 9, 1974, front page.
- "(Picture of Soviet Naval Infantry)", Sovetskii Voin, November 23, 1973, inside front cover.
- "(Picture of a Soviet Naval Landing)", K rasnaia Zvezda, May 16, 1970, p. 2.
- "(Picture of a Soviet Naval Landing)", <u>Pravda</u>, April, 17, 1970, p. 6.
- "(Picture of a Soviet Naval Landing)", Sovetskii Voin, December 25, 1971, front cover.
- "(Picture of a Soviet Naval Landing)", Sovetskii Voin, June 11, 1970, pp. 38-39.
- Prokhorov, A.M. <u>Bol'shala Sovetskala Entsiklopedila</u>, (<u>Large Soviet Encyclopedia</u>) Moskva: Soviet Encyclopedia.
- Pronichkin, A.P. "Nekotorye Voprosy Upravleniia Silami v Morskikh Desantakh" ("Several Questions of the Control of the Forces in Naval Landings")

 Morskoi Sbornik, October, 1964, pp. 24-30.
- Pumkarev. K. and Shcheglov, E. "S Morskim Desantom" ("With A Naval Landing") Tyl i Snabzhenie, October, 1976, pp. 36-39.
- Radchenko, N. "Desantu Prigotovit'sia!" ("Prepare for The Landing!") <u>Voennye Znaniia</u>, September, 1975, pp. 12-13.
- Roitenburd, L.N. "Podgotovka Ofitserov Morskoi Pekhoty" ("Training of Officers of The Naval Infantry")
 Norskoi Sbornik, November, 1969, pp. 51-55.
- Savkin, V.E. "Characteristics of Modern Warfare", Military Review, October, 1974, pp. 30-35.
- Savkin, V.E. "Surprise", Military Review, April, 1974, pp. 85-91.
- Sergeenko, B.I. "O Razvitii Desantnykh Sil" ("About The Development of Landing Forces") Morskoi Sbornik, March, 1971, pp. 23-29.

- Sergeenko, V.E. <u>Sovetskaia Morskaia Pekhota</u>. (<u>Soviet Naval Infantry</u>) Moskva: DOSAAF, 1971.
- Sergeev, N. "Slavnyi Sher Flota" ("Clorious Patron of The Fleet") <u>Tekhnika i Vooruzhenie</u>, October, 1972, pp. 2-3.
- Shablikov, N.I. Okean (Ocean) Moskva: MOD, 1970
- Shashuto, M. "Brat Moria" ("Brother of The Sea")
 Krasnaia Zvezda, October 20, 1973, p. 2.
- Shestakov, N. "Atakuet Morskaia Pekhota" ("Naval Infantry Attacks") Voennye Znaniia, November, 1965. pp. 10-11.
- Shevchenko, N. "Brone transporter Na Plavu" ("Armoured Carrier Afloat") Tekhnika i Vooruzhenie, August, 1973, pp. 22-25.
- Shimkevich, L.A. and Svetlov, A.G. "Osobennosti Vysadki Morskikh Desantov v Sovremennykh Uslovijakh" ("Features of a Debarkation of a Naval Landing Party In Modern Conditions") Morskoi Sbornik, March, 1964, pp. 22-27.
- Shutov, G. "Dva Desanta" ("Two Landings"), <u>Krasnaia</u>
 <u>Zvezda</u>, August 15, 1967, p. 1.
- Shutov, G. "Na Komandno-Shtabnom Uchenii "Sever"" ("At The Command-Staff Exercise "Sever"") Krasnaia Zvezda, July 14, 1968, p. 1.
- Shutov, G. "Na Komandno-Shtabnom Uchemii "Sever"" ("At The Command-Staff Exercise "Sever"")
 Krasnaia Zvezda, July 17, 1968, p. 1.
- Shutov, G. "Na Komandno-Shtabnom Uchenii "Sever"" ("At The Command-Staff Exercise "Sever"")
 Krasnaia Zvezda, July 20, 1968, p.).
- Shutov, G. "(Picture of a Soviet Marine Officer)" Krasnaia Zvezda, October 1, 1969, p. 1.
- Shutov, G. "(Picture of a Soviet Marine Officer And Several Marines)", Krasnaia Zvezda, August 6, 1968, p. 2.

- Shutov, G. "(Picture of a Soviet Marine Officer With A Polish And a GDR Officer)", <u>Krasnaia Zvezda</u>, July 24, 1968, p. 2.
- Shutov, G. "(Picture of A Soviet Naval Landing)", Krasnaia Zvezda, April 30, 1970, p.1.
- Shutov, G. "(Picture of Three Soviet Marine Officers)", Krasnaia Zvezda, July 18, 1968, p. 2.
- Shutov, G. "Visiting The Marines". Soviet Military Review, December, 1976, pp. 58-59.
- Sigal, D.S. "Sviaz' v Desantnykh Deistviiakh".
 ("Communications In Landing Operations"), Morskoi
 Sbornik, March, 1970, pp. 38-42.
- Smirnitskii, A.I. <u>Russo-Angliiskii Slovar</u> (<u>Russian-English Dictionary</u>) Moskva: "Soviet Encyclopedia" Publishing House, 1971.
- Sokha D. "Air Cushion Vehicles", The Soviet Naval Digest (translated from Morskoi Sbornik No 7, 1975, pp. 76-81) May, 1976, pp. 61-71.
- Sokholov, S. "Tanki Atakuiut s Moria" ("Tanks Attack From The Sea") Morskoi Sbornik, December, 1973, pp. 39-41.
- "Soldaty Moria" ("Soldiers Of The Sea") Voennye Znaniia.
 April, 1977, pp. 34-35.
- Sologubov, A. "Na Ucheniiakh Kak v Boiu" ("In Exercises As In Battle"), Znamenocets, July, 1975, p. 21.
- Sologubov, A. "(Picture of Soviet Marines Attacking)"
 Soviet Military Review, February, 1977, p. 20.
- Solomenik, M. "Atakuiushchie s Moria" ("Attackers From The Sea") <u>Voennye Znaniia</u>, May. 1973, pp. 10721.
- Solov'ev, V.I. "Sviaz' v Morskikh Desantakh" ("Communications In Naval Landings") Morskoi Sbornik, September, 1966, p. 21-28.
- Sorokin, V. "(Picture Of Soviet Marine Officer Riding A Mctorcycle)" <u>Krasnaia Zvezda</u>, August, 16, 1964, p. 2.

- Stepanishchev, N. "Shagi k Moriu" ("Steps Towards The Sea") Kommunist Vooruzhennykh Sil, December 23, 1976 pp. 51-52.
- Stepanov, A.P. Amphibious Vehicles, Charlottesville, Virginia: Foreign Science and Technology Center, U.S. Department of The Aray (translation DDC AD 769 743), August 30, 1973.
- Sunaev, A.N. "Nadezhnyi Pomoshchnik v Boiu", ("Reliable Assistant In Battle") Morskoi Sbornik, May, 1971, pp. 38-41.
- Sysoev, V.A. "Ekzamen Na Zrelost" ("Examination At Maturity") "Pravda Ukrainy, May 15, 1970, p. 3.
- Sysolinkin, I. "Seaborne Landings", Soviet Military Review, Pebruary, 1976, p. 32-33.
- Tass, "Na Sovmestnykh Ucheniiakh", ("In Joint Exercises")
 Krasnaia Zvezda, September 22, 1964, p. 1.
- Tass, "Sovmestnde Uchenie" ("Joint Exercise") Krasnaia Zvezda, August 29, 1967, p. 1.
- Teselkin, V. and Zadvinskii, V. "Na Desantnom Korable", ("On A Landing Ship"), Tekhnika i Vooruzhenje, July, 1975, pp. 30-31.
- "The Antisubmarine Cruiser Kiev" Soviet Military Review, November, 1976, pp. 22-23.
- "The Marine Corps", Soviet Military Review, June, 1973, pp. 48-49.
- Tkachev, V. "Otchizny Vernye Syny" ("Faithful Sons of The Motherland"), <u>Pravda Ukrainy</u>, July 28, 1968, p. 2.
- Tsymbal, A. "Tanki Atakuiut s Moria", ("Tanks Attack From The Sea"), Morskoi Sbornik, March, 1972, pp. 63-65.
- Tuz, D.A. "Rol' Morskikh Desantnykh Operatskk v Raketno-Iadernoi Voine", ("The Role of Naval Landing Operations in a Rocket-Nuclear War") Morskoi Sbornik, June, 1964, pp. 2/2-29.

- U.S. Air Force <u>Dictionary of Basic Military Terms A</u>
 <u>Soviet View</u>, Washington, D.X.: U/S Government
 Printing Office (translation of Russian
 publication) July, 1965.
- Usoshin, N. "Vo Vzaimodeistvii Podrazdelenii i Sluzhb Tyla - Zaiog Uspekha Obespecheniia Voisk" ("In The Interaction of Subunits and Services of The Rear - The Guarantee of Success Is The Provision of The Troops") Tyl i Snabzhenie, June, 1970, pp. 48-52.
- VAF, "(Picture of Polish Vehicle Exiting From Landing Ship") Krasnaia Zvezda, November 5, 1974, p. 3.
- Var, "U Nashikh Boevykh Druzei" ("At Our Fighting Friends") Krasnaiu Zvezda, September 17, 1967, p. 3.
- Vasil'ev, N. "Atakuiut Desanty", (Landers Attack")
 Younge-Znania, January, 1970, p. 5.
- Viunenko, N.P. "Sovremennye Morskie Desanty", ("Modern Amphibious Landings") Morskoi Sbornik, September, 1963, pp. 21-27.
- Vlasov, N. "Evolution of Surface Ships", Soviet Military Review, October, 1974, pp. 29-81.
- Verobyov, I. "Joint Actions By Land Forces And The Navy", Soviet Military Review, October, 1974, pp. 26-28.
- Vorobyov, I. "Unexpected Tactical Methods", Soviet Military Review, June, 1973, pp. 17-20.
- "Vsegda v Boevoi Gotovnosti" ("Always In Combat Readiness")

 Kommunist Vooruzhennykh Sil, January 2, 1975,
 pp. 26-31.
- Vysotskii, V. "(Picture of Soviet Marines Marching In Red Square In A Military Parade)" <u>Krasnaia</u> <u>Zvezda</u>, November 8, 1974. p. 2.
- Zhidilov, E. "Komandir Sbornoi Flota" ("Commander of A Combined Fleet") Sovetskii Sport, April 8, 1975, pp. 1-2.

- "Znamenatel'naia Stranitsa v Zhizni Flota", ("Significant Page In the Life of The Fleet") <u>Krasnaia Zvezda</u>, May 16, 1970, p. 3.
- Zolin, I. "Na Okeanskikh Prostorakh" ("On The Ocean Space") Pravda, April 14, 1970, p. 6.

BIBLIOGRAPHY

Western Sources

- Ackley, R.T. "The Soviet Navy's Role in Foreign Policy", Naval War College Review, May, 1972, pp. 48-65.
- Alsop, J. "Soviets Building Naval Base in Iraq on the Jersian Gulf", <u>USNI Proceedings</u>, July, 1973, pp. 119-120.
- Artemiev, V.P. "Soviet Military Institutions", Military Review, January, 1966, pp. 11-14.
- Baritz, J.J. Sovetskaia Voennaia Doktrina i Strategiia Garmisch: USARI, 1975/1976. Chapter 13.
- Baritz, J.J. "The Soviet Strategy of Flexible Response Military Affairs", Bulletin, Institute for the Study of the USSR, Munich, April, 1969, pp. 25-35.
- Batchelor, J., et al., Weapons and Uniforms of the USSR.
 London: Purnell & Sons, Ltd., 1975.
- Beaufre, A. et al., Strategy for the West, New York: Crane, Russak & Co. Inc., 1974.
- Beecher, W. "Gorshkov Papers Signify New Russian Naval Doctrine", Sea Power, May, 1973, pp. 14-17.
- Beecher, W. "New Soviet Carrier", New York Times. Feb. 14, 1968.
- Beecher, W. "Soviets Said to be Building a Second Aircraft Carrier", <u>USNI Proceedings</u>, June, 1973, pp. 113-114.
- "Berichme Aus dem Ausland", Suddeutsche Zeitung, Jan. 17, 1977, p. 10.
- Besch, E.W. "Armored and other Mechanized Forces Can Be Successfully Adapted to Amphibious Operations", Marine Corps Gazette, April, 1977, pp. 42-48.
- Blackman, R.V.B. ed. Janes Fighting Ships 1966/67. New York: McGraw-Hill Book Co., 1966.
- Blackman, R.V.B. ed. <u>Janes Fighting Ships 1971/72</u>, New York: McGraw-Hill Book Co., 1971.

- Blechman, B.M. The Changing Soviet Navy, Washington, D.C.: Brookings Institution, 1973.
- Blechman, B.M. The Control of Naval Armaments Prospects and Possibilities, Washington, D.C.: Brookings Institution, 1975.
- Bonds, R. ed. The Soviet War Machine, London: Hamlyn Publishing Group Ltd., 1976.
- Bramlett, D.A. The Soviet Airmobility: An Overview, Thesis (CGSC. US Department of the Army, 1975/76), pp. 2-3, 7
- Breyer, S. Guide To The Soviet Navy, Annapolis: USNI, 1970.
- Breyer, S. "Soviet Power in the Baltic", Military Review, January, 1962, pp. 41-47.
- Brooks, T.A. "Soviet Carrier Strategy", <u>USNI Proceedings</u>, June, 1974, p. 103.
- Brown, G.S. <u>US Military Costure for FY 1976 Statement</u>. Washington, D.C. Libenate Armed Services Committee, US Government Printing Office, 1976.
- Brown, N. "Turkey and the West", RUSI, June, 1976, pp. 63-67.
- Burrell, R.M. "More Power to the Navy", Soviet Analyst, November 1, 1973, pp. 2-3.
- Bussert, J.C. "The Navy Gap in the Seventies", <u>USNI</u>
 <u>Proceedings</u>, June, 1972, pp. 18-25.
- Buttigieg, J.A. and Elsley, G.H. "Hovercraft for Defence", RUSI, September, 1975, pp. 74-80.
- Buzan, B. "The Status and Future of the Montreux Convention", <u>Survival</u>, November/December, 1976, pp. 242-247.
- Carneghi, A.J. (review). "V/STOL: New Force For The Amphibious Task Force", (author H.C. Boschen, USNI Proceedings, July 1970, pp. 46-51) <u>USNI Proceedings</u>, January, 1971, pp. 79-81.

- Chapman, W.C. (review). "Soviet Marine", (author C.G. Pritchard, USNI Proceedings, March, 1972, pp. 18-30), USNI Proceedings, August, 1972, pp. 90-91.
- Chopra, M.K. The Growing Power Struggle in the Indian Ocean, Washington, D.C.: Translation Division, Naval Intelligence Support Center, Department of the Navy (translated Wehrkunde Vol 24, #2, 1975) (DDC ADA 031264) July, 1976.
- Chwat , J.S. and Collins, J.M. <u>United States/Soviet</u>

 Military Balance A Frame of Reference for Congress
 Washington, D.C.: US Government Printing Office,
 January 21, 1976.
- Cliff, D.K. "Soviet Naval Infantry: A New Capability?", Naval War College Review, June, 1971, pp. 90-101.
- Cooley, J.K. "West Watching Soviet Mediterranean Naval Manuevers", Christian Science Monitor, August 30, 1969. pp. 1-2.
- Couhat, J.L. and Masson, P. "The Soviet Presence in the Mediterranean: A Short History", Naval War College Review, January, 1971, pp. 60-66.
- Cox. D.R. "Sea Power and Soviet Foreign Policy", <u>USNI</u>
 Proceedings, June, 1969, pp. 32-44.
- Daly, R.W. "Soviet Naval Activities-1970", <u>USNI</u>
 <u>Proceedings</u>, May, 1971, pp. 285-292.
- DeBorchgrave, A. "A Mediterranean Tide Runs for the Russians", Newsweek, July 19, 1971, pp. 12-13.
- Dialer, F. Strategic Concepts of USSR and USA, (translation, West German: DDC ALB 007971). Charlottesville, Virginia: Foreign Science and Technology Center, US Department of the Army, September 25, 1974.
- Donnelly, C.L. "The Soviet Desant Concept",

 <u>International Defence Review</u>, December, 1971,
 pp. 544-546.

- Doublet, A.J. The Air Cushion Vehicle and Its Future
 Applicability in National Defense, Thesis (Air
 War College, April, 1976) (DDC AD BO11232)
 April, 1976, pp. 24-88.
- Drischler, A.P. "Standing Naval Forces for NATO: A Proposal", Survival, September/October, 1972, pp. 226-230.
- "East-West Cutting a Chain of Links", Time, January 4, 1971, p. 29.
- Eissenstat, B.W. The Soviet Union: The Seventies and Beyond, Lexington, Mass.: Lexington Books, 1975.
- Eller, E.M. The Soviet Sea Challenge, USA: Cowles Book Co. Inc., 1971.
- Enthoven, A.C. "US Forces in Europe: How Many? Doing What?", Foreign Affairs, April, 1975, pp. 513-532.
- Erickson, J. "Soviet Military Capabilities", Current History, October, 1976, pp. 97-100.
- Erickson, J. "Soviet Military Performance: Some Management and Managerial Constraints", unpublished research paper (USARI, 7th Annual Soviet Affairs Symposium, Garmisch, Germany), June, 1973, pp. 11-48.
- Erickson, J. "Soviet Naval Infantry", USARI, Garmisch, Germany. Personal interview, May 27, 1977
- Erickson, J. "The Soviet Naval High Command", <u>USNI</u>
 Proceedings, May, 1973, pp. 66-87.
- Fahey, J.A. "A Profile of Soviet Military/Naval Schools", USNI Proceedings, August, 1969, pp. 134-136.
- Fairhall, D. Russian Sea Power, Boston: Gambit, Inc., 1971.
- Farguharson, W.J. "Russia's Sea-Going Might!", Armed Forces Journal, August, 1974, pp. 33-39.

- Foley, J. "The Kiev More Dangerous Then First Thought", Reuter, (Brussels), August 4, 1976.
- Frasche, R.M. The Soviet Motorized Rifle Company,
 Washington, D.C.: Defense Intelligence Agency,
 October, 1976,
- Fredholm, C. "The North Atlantic: The Norwegian Sea, A Scandinavian Security Problem", Naval War College Review, June, 1972, pp. 56-64.
- Funkhouser, J.T. "Soviet Carrier Strategy", <u>USNI</u>
 <u>Proceedings</u>, December, 1973, pp. 27-37.
- Gannon, E.J. "Military Considerations in the Indian Ocean", <u>Current History</u>, November, 1972, pp. 218-221, 228-229.
- Garthoff, R. L. Soviet Military Policy, New York: Frederick A. Praeger, 1966.
- Gasteyger, C. "World Politics on the Seven Seas", Survival, March, 1970, pp. 92-98.
- Goodman, J.T. The Chinese Perception of the Spectrum of the Sino-Soviet Territorial Conflict, Thesis, (US Naval Postgraduate School, Monterey, Calif., March, 1975) (DDC ADA009568), March, 1975.
- Harvey, M.L. and Kohler, F.D., ed. "USSR Navy Shows the Flag", Soviet World Outlook, December 15, 1976, pp. 7-8.
- Haworth, D. "Denmark Feels the Heat of Warsaw Pact Baltic Exercises", <u>USNI Proceedings</u>, March, 1977, pp. 108-109.
- Hayes, J.D. "The Influence of Modern Sea Power, 1945-1970", USNI Proceedings, May, 1971, pp. 274-284.
- Heiman, L. "River Flotillas of the USSR", Military Review, August, 1970, pp. 45-51.
- Hemesley, A.E. Soviet Tank Company Tactics, Washington, D.C.: Defense Intelligence Agency, May, 1976.

- Herrick, R.W. <u>Soviet Naval Strategy</u>, Annapolis; USNI, 1968.
- Hessman, J.D. "Countdown to Crisis European Scenario: The Balance Shifts Eastward", Armed Forces Journal, July 4, 1970 and July 11, 1970, pp. 14-20, 18-21.
- Hessman, J.D. "The Soviet Union Moves Ahead: On Land, On the Sea, and In the Air", Armed Forces Journal, August, 1970, pp. 28-37.
- Hoeber, F.D. and Schneider, W. Jr. ed. Arms, Men and Military Budgets, New York: Crane, Russak, and Company, Inc., 1976
- Holst, J.J. "The Soviet Build-up in the North-East Atlantic", Survival, January/February, 1972. pp. 25-27.
- Hurewitz, J.C. Changing Military Perspectives in the Middle East, Santa Monica: The Rand Corporation, September, 1970.
- Hynes, W.R. "The Role of the Kiev in Soviet Naval Operations", Naval War College Review, Fall, 1976, pp. 38-46.
- "Infantry Landing Craft-Poland", Military Review, November, 1973.
- Jacobsen, C.G. Soviet Strategy-Soviet Foreign Policy, Glasgow: Robert MacLehose and Co. Ltd., 1972.
- Jacobsen, C.G. "The Soviet Navy: Acquiring Global Capabilities and Perspectives", Naval War College Review, March, 1972, pp. 41-52.
- "Jane's Valuable Intelligence", <u>Armed Forces Journal</u>, September 7, 1970, pp. 37-38.
- Johnson, A.R. <u>Has East Central Europe Become a Liability</u>
 to the <u>USSR. A Military Aspect</u>, Santa Monica: The
 Rand Corporation., November, 1975.
- Johnstone, W.C. The Balance of Power in the Asian-Pacific Area, C. 1980, Washington, D.C.: The Washington Center of Foreign Policy Research (DDC AD687180) 1968.

- Jukes, G. "The Indian Ocean in Soviet Naval Policy", Adelphi Papers, No. 87 (May, 1972)
- Keating, J.S. The New Conquistadors: The Soviets in the Caribbean, Thesis (Air War College, April, 1976) (DDC ADBOLL171), April, 1976 pp. 26-61.
- Keefe, E.K. Area Handbook for the Soviet Union, Washington, D.C.: US Government Printing Office, 1971.
- Kidd, I.C. Jr. "A Look at US-Soviet Rivalry in the Mediterranean". US News and World Report, November, 1971, pp. 110-111.
- Kidd, I.C. Jr. "View From the Bridge of the Sixth Fleet Flagship", <u>USNI Proceedings</u>, February, 1972, pp. 18-29.
- "Kiev Move Seen as Significant", UPI, July 20, 1976, p. 1.
- Kirk, R. "China Helps US Meet Soviet Naval Threat", Baltimore Sun, June 17, 1973.
- Klare, M.T. "Superpower Rivalry at Sea", Foreign Policy, Winter, 1975, pp. 86-96, 161-167.
- Employment, unpublished research paper (USARI, Garmisch, Germany, 1976) pp. 1-9.
- Kreker, H.J. "The Soviet Union and the Mediterranean", Military Review, August, 1970, pp. 21-26.
- Labich, K. "Russia's Blue-Water Bid", Newseek (Europe), February 21, 1977, pp. 8-13.
- Lawton, J. "Air oft Carrier Joins Soviet Pleet", ost, July 19, 1976, pp. 1-2.
- Lenczowski, G. Soviet Advances in the Middle East.
 Washington, D.C.: American Enterprise Institute
 for Public Policy Research, February, 1971.

- Libbey, M.A. "The Strategic Balance in the Mediterranean", (review) (author J.W. Lewis Jr., American Enterprise Institute for Public Policy Research, 1976) USNI Proceedings, February, 1977, pp. 85-88.
- Library of Congress. "US/USSR Military Balance", Armed Forces Cournal, April, 1976, pp. 23-28.
- Lind, W.S. (review) "The Soviet Aircraft Carrier", (author N. Polmar, USNI Proceedings, October, 1976, pp. 138-141), <u>USNI Proceedings</u>, February, 1977, p. 79.
- Mackintosh, M. "The Warsaw Pact Today", <u>Survival</u>, May/June, 1974, pp. 122-126.
- "Major Soviet Air Exercise", Armed Forces Journal, May 9, 1970, pp. 14-15.
- Manners, R.D. Artic Surface Effect Vehicles Vol I

 An Overview of SEV Developments, McLean, Virginia:
 Acience Applications, Inc. (DDC AD922 061L), 1974.
- Manthorpe, W.H.J. "The Soviet Navy in 1976". <u>USNI</u>
 <u>Proceedings</u>, May, 1977, pp. 202-214.
- Marcus, J.S. Military Schools for Prospective Officers of the Soviet Armed Forces, unpublished research project (USARI, Garmisch, Germany, March, 1975) March, 1975, pp. 1-65.
- MccGwire, M. ed. <u>Soviet Naval Developments</u>, New York: Praeger Publishers, 1973.
- MccGwire, M. "Soviet Naval Programmes", <u>Survival</u>, September/October, 1973, pp. 218-227.
- Meehan, J.F. "Soviet Manuevers: Summer 1971", Military Review, April, 1972, pp. 14-21.
- Meehan, J.F. The Soviet "Marine Corps", unpublished research project (USARI, Garmisch, Germany, February, 1972).
- Middleton, D. "Soviets Beefing Up Navy in Mediterranean", New York Times, July 22, 1976.
- Miede, K. From the Russo-Balt to the 60PB(II).
 Charlottesville, Va.: Foreign Science and
 Technology Center, US Department of the Army,
 (translation DDC AD 885 604) 1971.

- Millar, T.B. "Soviet Policies South and East of Suez", Foreign Affairs, October, 1970, pp. 70-80.
- Mitchell, D.W. "The Soviet Naval Challenge", Orbis, Spring, 1970, pp. 129-153.
- Moller, 0. "Danish Security Policy", NATO Review. #5 (Sept/Oct) 1976, pp. 3-5.
- Mocre, J.E., ed. <u>Janes Pighting Ships 1975-76</u>. New York: Franklin Watts Inc., 1975.
- Moore, J.E., ed. <u>Jane's Fighting Ships 1976-77</u>. New York: Franklin Watts, Inc., 1976.
- Moore, J.E. The Soviet Navy Today, London: MacDonald and Jane's, 1975.
- "More Details of New Soviet Carrier Revealed", Armed Forces Journal, March, 1973, p. 24.
- Moulton, J.L., "Seaborne and Airborne Mobility in Europe", USNI Proceedings, May, 1974, pp. 122-143.
- Musel, R. "Naval Scientists Evaluate Kiev", <u>UPI</u>, August 20, 1976, p. 1.
- Nargels, D.G. "The Soviet Tank Company is Designed To Be an Effective Part of a Larger Tank Force", Marine Corps Gazette, April, 1977, pp. 49-55.
- NATO and the Defence of Europe, <u>Issues</u>, <u>U.S. Department</u> of State, September, 1969, pp. 4-5, 24-25.
- NATO Facts and Figures, Brussels: NATO Information Service, January, 1976.
- "NATO Looking Southward", <u>Time</u>, December 22, 1967, pp. 25-26.
- Owen, J.I.H., ed. Warsaw Pact Infantry and It's Weapons, London: Brassey's Publishers Ltd., 1976.
- Pafenberg, J.D. <u>Soviet Preinduction Military Training</u>, 439th Military Intelligence Detachment, U.S. Department of the Army, May 16, 1974.

- Paone, R.M. "The Scviet Threat in the Indian Ocean", Military Review, December, 1970, pp. 48-55.
- Parnell, C.L. "'Sever'and the Baltic Bottleneck", USNI Proceedings, August, 1969, pp. 26-36.
- "Polish Landing Craft Used for Commando Operations", USNI Proceedings, April, 1974, p. 126.
- Polmar, N. "Alarmist versus Realist", Atlantic Community Quarterly, Fall, 1972, pp. 368-378.
- Polmar, N. "Soviet Naval Aviation", Air Force Magazine, March, 1976.
- Polmar, N. Soviet Naval Power Challenge For The
 1970's, New York: National Strategy Information
 Center, Inc., 1972.
- Polmar, N. "The Soviet Aircraft Carrier", <u>USNI</u>
 <u>Proceedings</u>, May, 1974, pp. 144-161.
- Polmar, N. "The Soviet Naval Air Force", <u>USNI</u>
 <u>Proceedings</u>, March, 1977, pp. 96-101.
- "Power at Sea The New Environment", Vol I, Adelphi Papers, No. 122, (Spring, 1976).
- "Power at Sea Super-powers and Navies", Vol II, No. 123, (Spring, 1976) Adelphi Papers.
- "Power at Sea Competition and Conflict", Vol III, Adelphi Papers, No. 124, (Spring, 1976).
- Prina, L.E. "US Navy 1975". Air Force Magazine. November, 1975. pp. 34-40.
- Pritchard, C.G. "Soviet Marines", <u>USNI Proceedings</u>, March, 1972, pp. 18-30.
- "PTS-M Soviet Amphibious Truck", Soldat und Technik, (Frankfurt)(DDC AD867755), pp. 432-433.
- Raymond, D.A. An Unclassified View of Soviet

 Airmobile Capabilities, unpublished recearch project (CGSC, US Department of the Army, 1976).

- "Reaching For Supremacy At Sea", <u>Time</u>, January 31, 1972, pp. 10-15.
- "Red Navy: Aiming To Be No.1", <u>US News and World Report</u>, March 12, 1973, p. 33.
- Roberts, J.L. "The Growing Soviet Naval Presence In ...e Caribbean: Its Politico-Military Impact Upon The United States", Naval War College Review, June, 1971, pp. 31-42.
- Rohwer, J. Superpower Confrontation On The Seas
 Naval Development and Strategy Since 1945,
 London: The Center for Strategic and International Studies, Georgetown University, 1975.
- RUSI, ed. <u>Defence Yearbook 1975/76</u>, London: Brassey's Publishers Ltd., 1975.
- RUSI, ed. <u>Defence Yearbook 1976/77</u>. London: Brassey's Publichers Ltd., 1976.
- "Russia Power Play on the Oceans", Time, February, 1968, pp. 17-24.
- "Russia's New Naval Muscle", <u>USNI Proceedings</u>, January, 1974, pp. 108-109.
- Schemmer, B.F. "Soviet Armed Helicopter Force Said to Double By Middle of 1977", Armed Forces Journal, December, 1976, pp. 28-29.
- Schemmer, B.F. "Soviet Build-up on Central Front Poses New Threat to NATO", Armed Forces Journal, December, 1976, pp. 30-33.

and the second s

Statement of the same of the s

- Schemmer, B.F. "US/Ussr Military Balance Shifts in Favor of Russia", Armed Forces Journal, March, 1976, pp. 18-22.
- Scott, H.F. Soviet Military Doctrine: Its Formulation and Dissemination, Menlo Park, California: Stanford Research Institute (DDC AD 743 909) June 17, 1971.
- Shapiro, S. "The Blue Water Soviet Naval Officer", USNI Proceedings, February, 1971, pp. 18-26.

- Sick, G.G. "Russia and The West In the Mediterranean: Perspectives For the 1970's", Naval War College Review, June, 1970, pp. 48-69.
- "6 Landing Craft Joining Russian Mideast Fleet", Evening Star (Washington, D.C.) March 6, 1970.
- Sloss, D.A. Water Performance Tests of The BTR-50 Pu Armored Personnel Carrier, Stevens Institute of Technology Davidson Laboratory (DDC AD 914 386L) September, 1973.
- "Somalia Allows Soviets To Use Naval Facilities", Stars
 And Stripes, May 2, 1977, p. 27.
- "Sormovich Air Cushion Vehicle Production Is Set For 1975", USNI Proceedings, December, 1973, pp. 123-124.
- "Soviet Fleet Admirels Praise Russian Navy Sinking Force", <u>USNI Froceedings</u>, January, 1972, p. 111.
- "Soviet Major Combatants", <u>USNI Proceedings</u>, June, 1974, p. 72.
- "Soviet Manuevers Summarized", <u>USNI Proceedings</u>, November, 1970, p. 101.
- "Soviet Naval Quality Worries NATO", Aviation Week and Space Technology, November 25, 1974, p. 22.
- "Soviet Navy Nore Impressive Than US In The Indian Ocean", USNI Proceedings, February, 1974, pp. 117-118.
- "Soviet Thrust In The Mediterranean", Time, June 28, 1971, pp. 27-28.
- "Soviet Union Building Naval Bases On Red Sea", <u>USNI</u> Proceedings, December, 1973, pp. 122-123.
- Stanhope, H. "New Soviet Carrier No Match For US Ships", London Times, November 19, 1976, p. 1.
- Sterne, J.R.L. "Soviet Forces Strengthen In Northern Peninsula Area", <u>USNI Proceedings</u>, September, 1972, pp. 115-116.

- "Strategic Survey 1971", London: International Institute for Strategic Studies, 1972.
- Strimbu, G. The Development of Soviet Cold War Strategy, unpublished research project (USARI, Garmisch, Germany, March, 1974). pp. 17-77.
- Swanborough, G. and Taylor, J.W.R. <u>Military Aircraft</u>
 of The World, New York: Charles Scribner's Sons,
 1975.
- Takle, E.P. "Soviet Naval Infantry", RUSI, June, 1975, pp. 29-31.
- Taylor, J.W.R. "Gallery of Soviet Aerospace Weapons",
 Air Force Magazine, March, 1975, pp. 70-72.
- Taylor, J.W.R. "Gallery of Soviet Aerospace Weapons",
 Air Force Magazine, March, 1975, pp. 102-103.
- Taylor, J.W.R. "Gallery of Soviet Aerospace Weapons",
 Air Force Magazine, March, 1977, pp. 97-98.
- Theberge, J.D., Soviet Seapower In The Caribbean:
 Political and Strategic Implications, New York:
 Praeger Publishers, 1972.
- The Military Balance 1970/71. London: International Institute for Strategic Studies, 1970.
- The Military Balance 1971/72, London: International Institute for Strategic Studies, 1971.
- The Military Balance 1972/73, London: International Institute for Strategic Studies, 1972
- The Military Balance 1973/74. London: International Institute for Strategic Studies, 1973.
- The Military Balance 1974/75, London: International Institute for Strategic Studies, 1974.
- The Military Balance 1976/77. London: International Institute for Strategic Studies, 1976.
- "The Russian Challenge", Newsweek, January 24, 1977, p. 32.

- "The Soviet Navy", The Economist, March 3, 1973.
- The Soviet Threat To NATO's Northern Flank, London:
 Foreign Affairs Research Institute, No. 14, 1976.
- "The Soviet Union and Warsaw Pact (Military Lulance) 1975/76", Air Force Magazine, December, 1975, pp. 49-54.
- "The Soviet Threat To Nato's Northern Flank", Time, October 18, 1971, p. 31.
- "The Theatre Balance Between NATO and The Warsaw Pact (Military Balance)", Air Force Magazine, December, 1975, pp. 96-104.
- "The United States and The Soviet Union (Military Balance)", Air Force Magazine, December, 1975, pp. 46-47.
- Turbiville, G. "A Soviet View of Heliborne Assault Operations", Military Review, October, 1975, pp. 3-15.
- Turbiville, G. "Soviet Airborne Troops", Military Review, April, 1973, pp. 60-70.
- Tu. ville, G.H. "Warsaw Pact Amphib Ops in Northern Europe", <u>Marine Corps Gazette</u>, October, 1976, pp. 20-27.
- Ulstein, E. "Nordic Security", Adelphi Papers, No. 81 (November, 1971) pp. 9-26.
- U.S. Army Armour School, <u>The Threat</u>, Fort Knox, Kentucky: Command and Staff Department, U.S. Army Armour School, US Department of the Army, November, 1975.
- U.S. Army CGSC The Leavenworth Assessment of The Warsaw Pact Threat in Central Europe, Fort Leavenworth, Kansas: Threats Division, CGSC, U.S. Department of the Army, July 1, 1976.
- U.S. Army Infantry School Opposing Force Handbook, Pt. Benning, Georgia: U.S. Army Infantry School, U.S. Department of the Army, 1976.

- U.S. Department of the Army FN 30-40: Handbook on Soviet Ground Forces, Washington, D.C.: Headquarters, Department of the Army, June 30, 1975.
- U.S. Department of the Army Military Operations of the Soviet Army, Arlington, Virginia: Office of the Assistant Chief of Staff for Intelligence, U.S. Department of the Army, May, 1976.
- U.S. Department of the Army <u>Tactics and Organization of Soviet Ground Forces Different Parts.</u>
 Charlottesville, Virginia: Foreign Science and Technology Center, U.S. Department of the Army, (Translation DDC ADB 001 901) November 20, 1974.
- U.S. Department of the Army <u>TC 30-4 The Motorized Rifle Rifle Regiment</u>, Washington, D.C.: TRADOC, U.S. Department of the Army, June, 1975.
- U.S. Department of the Army TC 30-102 The Motorized Rifle Company, Washington, D.C.: TRADOC, U.S. Department of the Army, September, 1975.
- U.S. Department of the Army The Soviet 4X4 (8x8)Armored Truck BTR 40P. Charlottesville, Virginia: Foreign Science and Technology Center, U.S. Department of the Army (DDC AD 859 292 translation from Soldat und Technik #3 1969, p. 120-126).
- U.S. Department of the Army <u>The Soviet Marine Regiment</u>, Charlottesville, Virginia: Foreign Science and Technology Center, U.S. Department of the Army, (translation Soldat und Technik, February, 1970) (DDC AD 876 437).
- "Use of Freehand V/STOL Expected For Soviet Carriers", USNI Proceedings, July, 1974, p. 122.
- "USSR Naval Forces", Military Review, July, 1964, p. 105.
- "USSR Soviet Marine Corps", Military Review, September, 1965, p. 106.
- Vernon, G.D. <u>The Soviet Strategy of Plexible Response</u>. unpublished research project (USARI, Garmisch, Germany, May, 1970) pp. 4-49.

- Viktorov, G.M. <u>Sovremennaia Organizatsiia Vooruzhennykh</u> <u>Sil SSSR</u>, Garmisch: USARI, 1976/77.
- Walker, W. "The Defence of the Northern Flank", <u>RUSI</u>, September, 1973, pp. 21-30.
- Walton, M.A. and Watson, B.W. "Gkean-75", <u>USNI Proceedings</u>, July, 1976, pp. 93-97.
- Wargo, P.M. "Evolution of Soviet Airmobility", Military Review, November, 1975, pp. 3-13.
- Weatherall, E. "Russia Seeks Bases For Indian Ocean Fleet", USNI Proceedings, July, 1970, pp. 129-130.
- Wegener, E. The Soviet Naval Offensive, Annapolis: USNI, 1975.
- Weinland, R.G. "The Changing Mission Of The Soviet Navy", Survival, May/June, 1972, pp. 129-133.
- Whiting, K.R. Soviet Air Power 1917-1976, Marwell AFB, Alabama: Air University, August, 1976.
- Wiener, F. The Armias of The Warsaw Pact Nations, Vienna: Carl Weberreuter Publishers (translation by W.J. Lewis, 1976).
- Wolfe, T.W. Evolution of Soviet Military Policy, Santa Monica: The Rand Corporation, February, 1968.
- Wolfe, T.W. Soviet Power and Europe: The Evolution of A Political-Military Posture 1945-1964, Santa Monica: The Rand Corporation, November, 1968.
- Wolfe, T.W. Soviet Power and Europe 1965-1969, Santa Monica: The Rand Corporation, July, 1969.
- Wolfe, T.W. Soviet Strategy at The Crossroads, Santa Monica: The Rand Corporation, April, 1964.
- Wolfe, T.W. "The Projection of Soviet Power", <u>Survival</u>, May, 1968, pp. 159-165.
- Wolfe, T.W. "The Soviet Military Since Khrushchev", Current History, October, 1969, pp. 220-227, 240.

- Wolfe, T.W. The Soviet Quest for More Glebally Mobile Military Power, Santa Nonica: The Rand Corporation, December, 1967.
- Wyras, J.A. Soviet Maritime Strategy Since World War II, unpublished Master's thesis (Niagara University, New York) December, 1972.
- Zoppo. C. "Soviet Ships In The Mediterranean And The U.S.-Soviet Confrontation In The Middle Bast", Orbis, Spring, 1970, pp. 109-128.